Jan

WA 2917
3B

PSC
PHILIP SERVICES CORP.
INDUSTRIAL SERVICES GROUP
Western Region

RECEIVED
OCT 15 2003
OFFICE OF WASTE & CHEM. MGMT.

October 9, 2003

FEDERAL EXPRESS

10/9/03

Ms. Stacie Singleton
Department of Ecology - HQ
HWTR Program
300 Desmond Drive
Lacey, WA 98503

Mr. Galen Tritt
Department of Ecology - NWRO
3190 160th Ave., SE
Bellevue, WA 98008-5452

FILE COPY

Re: Submittal of the Revised Terminal 91 Tank Farm Lease Parcel Dangerous Waste Permit Renewal Application

Dear Ms. Singleton and Mr. Tritt:

Enclosed please find a revised copy of the dangerous waste permit renewal application for the Terminal 91 Tank Farm Lease Parcel, which addresses the comments that Ecology provided in the August 21, 2003 Notice of Deficiency letter. As you know, the purpose of this permit renewal application is solely for the purpose of renewing and extending the Part B Permit for corrective action activities.

Philip Services Corporation (PSC) and the Port of Seattle (POS) have provided responses to each of your comments within the revised document. A complete revision of the document is attached, including a redlined version of the text to make it easy for Ecology to identify changes made to the original application. The following figures have been added to the Part B application in response to Ecology's comments on Section B of the Part B application:

- Figures A1-2 and A1-3 each provide a clearly defined facility outline for the Form 1 topographic map requirement.
- Figure B2-2 shows on-site surface water (storm water) flow or drainage patterns.
- Figure B2-3 shows the wind patterns including a wind rose of the area near the site.
- Figure B2-4 shows the traffic patterns at the site related to corrective action activities.
- Figure J1-1 shows the 100-year floodplain and was included in Section J rather than Section B, because this is where the information was located in the original permit application.

Per our September 19, 2003 request for an extension on this submittal and your October 2, 2003 approval of this extension, this application is being submitted later than the original due date and the signature pages will be sent to you under separate cover from the Port of Seattle. The POS will ensure that the owner certification signature for the POS has the authority per WAC 173-303-810(12)(a)(i) to sign for the Chief Executive Officer (CEO), if the CEO is not available to

PSC
PHILIP SERVICES
CORP.
INDUSTRIAL SERVICES
GROUP
Western Region

sign the document. If you have further questions or concerns regarding this application, please contact me at (425) 227-6121.

Sincerely,

Carolyn Mayer
Corrective Actions Manager
Regulatory Affairs Department

Enclosures

Cc: Jan Palumbo, US EPA Region 10
Mic Dinsmore, Port of Seattle
Kathy Bahnick, Port of Seattle
Sue Roth, Roth Consulting
Brian Knox, Preston, Gates and Ellis
Laweeda Ward, PSC
Marlys Palumbo, Van Ness Feldman

Bcc: Jack Wolfin, PSC
Mo Azose, PSC
Andy Maloy, PSC

TERMINAL 91 TANK FARM LEASE PARCEL

RCRA PERMIT RENEWAL APPLICATION

MASTER TABLE OF CONTENTS

ATTACHMENTS

SECTION A
PART A OF THE RCRA PERMIT APPLICATION

TABLE OF CONTENTS

LIST OF FIGURES

SECTION A. PART A OF THE RCRA PERMIT APPLICATION

40 CFR 270.10(d), 270.11(a) and (d), 270.13
WAC 173-303-806(2), 810(2), 810(12)(a), 810(13)
WAC 173-303-610(b)(1)

A1.0 BACKGROUND INFORMATION

A1.1 Revisions Included in Part A Application for Part B Permit
Revised, July 1990, September 1990, December 1990, November 1991, August 2002

Several changes were made to the interim status Part A dated February 18, 1986 to be consistent with the current status of operations at the permitted Terminal 91 Tank Farm Lease Parcel, which consists of a four-acre parcel formerly operated by Burlington Environmental Inc. ("Burlington") under a lease from the Port of Seattle (the "Port"), the past and current owner for purposes of the Permit. (For purposes of this Permit renewal application, the definitions that were set forth in Agreed Order No. DE 98HW-N108 by and among the Washington Department of Ecology ("Ecology"), Burlington, the Port and Pacific Northern Oil Corporation ("PNO") and made effective April 10, 1998 (the "Agreed Order") will be used). A copy of the Agreed Order is enclosed with this application.

Burlington makes these revisions consistent with WAC 173-303-610 (Closure and post-closure) and the corrective action requirements identified in the operating permit for the facility dated August 26, 1992 (i.e., the "Part B Permit") and permit modification dated June 17, 1998, which incorporates additional property owned by the Port into the permit for purposes of conducting corrective action. The revisions in this permit renewal application reflect two main developments that have occurred since 1992.

(1) Burlington ceased all active dangerous waste treatment and storage operations at the facility in 1995. In 1997, Burlington completed above-ground decontamination and closure of facility units that had previously managed dangerous waste. Dangerous waste handling activities no longer occur at the facility. In 2003, Ecology approved above-ground closure of the facility.

(2) Ecology modified the existing Part B Permit on June 17, 1998, adding two conditions that provide administrative procedures for corrective action at different parts of the facility owned by the Port. The first condition incorporates the Agreed Order to

provide for corrective action relating to the Tank Farm Lease Parcel (that is, the four-acre facility where Burlington operated the permitted dangerous waste treatment and storage operations until 1995). The second condition provides for corrective action at the remainder of contiguously owned property through a Model Toxics Control Act ("MTCA") voluntary cleanup process, which has since replaced the independent remedial action process that was in place in 1998. Together these conditions govern the only activities proposed to occur under this renewed permit, namely, corrective action activities. As such, Sections VI.B.1 and VI.B.2 of the Part B Permit will be the only operative portions of the renewed Part B Permit.

As a result of these developments, much of the information typically required in Part A and Part B permit applications is not pertinent to this application, and, therefore, is omitted. Burlington and the Port submit this dangerous waste permit renewal application for the sole purpose of corrective action activities at the facility.

Part A Information

All information submitted in Part A of this Permit Renewal Application (the "Application") is solely for the purpose of renewing and extending the Part B Permit for corrective action activities. These revisions include:

FORM 1, Section II

Burlington completed above-ground closure of all dangerous waste treatment and storage units at the Tank Farm Lease Parcel in 1997 under a closure plan (as revised) approved by Ecology in October 1996. Burlington subsequently terminated its lease of the Tank Farm Lease Parcel in 1997 and has had no presence at the Site following termination of the Port lease, except as required for corrective action under the Part B Permit and the Agreed Order. The Port continues to own the Tank Farm Lease Parcel, and new operators have taken legal control of the Tank Farm Lease Parcel for operations not related to treatment and storage of dangerous waste. Burlington will remain the "operator" in the Application for the sole regulatory purpose of meeting the applicable corrective action requirements of the Agreed Order. The Port is the owner of the Tank Farm Lease Parcel, but has never operated a permitted dangerous waste treatment, storage, or disposal facility at the Tank Farm Lease Parcel. Ecology approved above-ground closure of the facility in 2003.

FORM 1, Section III

Burlington has revised this section of the Application to identify the appropriate current Burlington contact personnel.

FORM 1, Sections IV, VI and VII

Burlington has revised this section of the Application replacing the former facility mailing address and phone number (as in the former Part A) with the current corporate mailing address and phone number for Burlington's regional office location. Burlington currently has no operations or personnel located at the Tank Farm Lease Parcel. In Section VI, the SIC Codes also have been removed as all waste management operations at the Tank Farm Lease Parcel were terminated and, as such, the Codes are no longer relevant or applicable.

FORM 1, Section IX

Burlington has revised this section of the Application to show changes to the map of the Tank Farm Lease Parcel (as necessary) to reflect the closed facility structures including former dangerous and non-dangerous waste treatment and storage units and structures at the Tank Farm Lease Parcel.

FORM 1, Section X

Burlington closed its operations in 1995 and left the Tank Farm Lease Parcel in 1997. Burlington is not currently conducting any business at the Tank Farm Lease Parcel. Burlington engages in corrective action at the Site under the applicable requirements of the Agreed Order. The previous statement in this section regarding the Nature of the Business reads:

> *Pier 91 is a waste oil reclamation facility. By utilizing tank treatment, reusable oil is reclaimed by separating out the impurities (water, solids). Hazardous and non-hazardous wastewater is treated for contaminants such as metals, phenolics and solvents, and the treated wastewater is discharged to the sewer. Solids are centrifuged and sent off site for treatment and/or disposal. The Pier 91 Facility is*

also a generator, storer, and marketer of used oil fuel and hazardous waste fuel (dangerous waste fuel).

and has been revised in the Application to read as follows:

Burlington conducts no business activities of any kind or nature whatsoever at the Site. Burlington, the Port and PNO continue corrective action associated with historical contamination from fuels storage and waste oil operations, including Burlington's permitted waste management operations at the Site. Such corrective action, for which Burlington and the Port seek the renewal of this Permit, is implemented pursuant to the Agreed Order.

FORM 1, Section XI

Burlington has revised this section in the Application to state the name of the current corporate official, Jack Wolfin, Vice President, Northwest Region.

FORM 3, Section II

This section of the Application has been revised to state that the Tank Farm Lease Parcel received a final RCRA operating permit.

FORM 3, Section III

This section of the Application is no longer applicable so identification of storage and treatment capacities was omitted, as Burlington no longer conducts any regulated dangerous waste activity at the Tank Farm Lease Parcel.

FORM 3, Section IV

This Section of the Application is no longer applicable as Burlington no longer conducts any regulated dangerous waste activity at the Tank Farm Lease Parcel. However, the NAIC code for hazardous waste management was included in this section per Ecology's request.

FORM 3, Section V

The facility drawing in the Application has been revised to show the updated layout for the Tank Farm Lease Parcel [as well as former lease boundaries and facility structures]. In addition, two new drawings have been provided to more clearly identify the Tank Farm Lease Parcel.

FORM 3, Section VI

Updated photos of the Tank Farm Lease Parcel have been added to show the current view of the Tank Farm Lease Parcel and surrounding area and facilities currently in operation following closure of the permitted waste management operations at the Tank Farm Lease Parcel.

FORM 3, Section IX

The owner certification signature in the Application has been changed to Mic Dinsmore, Chief Executive Officer, to reflect a change in authorized corporate personnel at the Port.

FORM 3, Section X

Burlington has identified a current corporate officer for certification and signature in the Application. The current duly authorized officer is Jack Wolfin, Vice President, Northwest Region.

SECTION A2.0
PART A DANGEROUS WASTE PERMIT FORMS 1 AND 3
Revised, Jan. 1990, Sept. 1990, Dec. 1990, Nov. 1991, Aug. 2002

FORM 1	State of Washington Department of Ecology	WASHINGTON STATE DANGEROUS WASTE PERMIT GENERAL INFORMATION (Read "Form 1 Instructions" before starting)	1. EPA/STATE I.D. NUMBER WAD008129117

II. NAME OF FACILITY

BURLINGTON ENVIRONMENTAL INC.*

III. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
MAYER, CAROLYN CORRECTIVE ACTIONS MGR.	425 227 0311

IV. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 955 POWELL AVENUE SW

B. CITY OR TOWN	C. STATE	D. ZIP CODE
RENTON	WA	98055

V. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 2001 W GARFIELD STREET

B. COUNTY NAME: KING

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
SEATTLE	WA	98119	

VI. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
(specify)	(specify)
C. THIRD	**D. FOURTH**
(specify)	(specify)

VII. OPERATOR INFORMATION

A. NAME: BURLINGTON ENVIRONMENTAL INC.*

B. Is the name listed in Item VII-A also the owner? ☐ YES ☒ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box; if "Other", specify)*

F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC *(other than federal or state)*; O = OTHER *(specify)*

P (specify)

D. PHONE (area code & no): 425 227 0311

E. STREET OR P.O. BOX: 955 POWELL AVENUE SW

F. CITY OR TOWN	G. STATE	H. ZIP CODE
RENTON	WA	98055

VIII. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

COMPLETE BACK PAGE

* a wholly owned subsidiary of Philip Services Corporation

IX. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond the property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map areas. See instructions for precise requirements.

Figure A1-1 shows a topographic map extending at least one mile beyond the property boundary, an outline of the facility, and all surface water bodies. Figure A1-2 shows shows a topographic map extending at least one-half a mile beyond the property boundary, an outline of the facility, and all surface water bodies. Figure A1-3 shows the outline of the facility and the former hazardous waste treatment areas. There were and are no intake and discharge structures, injection wells, or springs or rivers at the facility.

X. NATURE OF BUSINESS ***(provide a brief description)***

Corrective action activities associated with the former on-site waste oil reclamation facility are conducted at the Pier 91 Facility. No other permitted operations are conducted at the site.

XII. HAZARDOUS DEBRIS

Not Applicable.

XI. CERTIFICATION ***(see instructions)***

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, in-cluding the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
Jack Wolfin Vice President, Northwest Region		10-7-03

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch)

FORM **3**

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER

W	A	D	0	0	0	8	1	2	9	1		7

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED *(mo., day & yr)*	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark only one box) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[ ] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

MO.	DAY	YR.

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (mo., day, & yr.) OPERATION BEGAN OR IS EXPECTED TO BEGIN

MO.	DAY	YR.

B. REVISED APPLICATION *(place an "X" below and complete Section I above)*

[ ] 1. FACILITY HAS AN INTERIM STATUS PERMIT

[X] 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code form the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the codes in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the *(Section III-C)*.

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.
1. AMOUNT - Enter the amount.
2. UNIT OF MEASURE - For each amount entered in cloumn B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D80	GALLONS OR LITERS
LANDFILL	D81	ACRE-FEET *(the volume that would cover one-acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D82	*ACRES OR HECTARES*
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for physical, chemi thermal or biological treatment processes not occuring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U

UNIT OF MEASURE	UNIT OF MEASURE CODE
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H

UNIT OF MEASURE	UNIT OF MEASURE CODE
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING SECTION III *(shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.*

LINE NUMBER	A. PROCESS CODE *(from list above)*	B. PROCESS DESIGN CAPACITY 1. AMOUNT *(specify)*	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE *(enter code)*	FOR OFFICIAL USE ONLY
		NOT APPLICABLE		

LINE NUMBER	A. PROCESS CODE *(from list above)*	B. PROCESS DESIGN CAPACITY 1. AMOUNT *(specify)*	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE *(enter code)*	FOR OFFICIAL USE ONLY

Continued from the front.

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY

NOT APPLICABLE

IV. DESCRIPTION OF DANGEROUS WASTES

A. DANGEROUS WASTE NUMBER -- Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.

B. ESTIMATED ANNUAL QUANTITY -- For each listed waste entered in column A estimate the annual quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE -- For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure or quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate **all** the processes that will be used to store, treat, and/or dispose of all non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for enetering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION:

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO	A. DANGEROUS WASTE NO. *(enter code)*	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE *(enter*	D. PROCESSES 1. PROCESS CODES *(enter)*	D. PROCESSES 2. PROCESS DESCRIPTION *(if a code is not entered in D(1))*

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER *(enter from page 1)*
WAD 000812917

IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

LINE NO.	A. DANGEROUS WASTE NO. *(enter code)*	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE *(enter*	D. PROCESSES 1. PROCESS CODES *(enter)*	D. PROCESSES 2. PROCESS DESCRIPTION *(if a code is not entered in D(1))*
	No dangerous waste is handled at this closed facility. The former NAIC Code for the site was 562211.				
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Continued from page 2.
NOTE. Photocopy this page before completing if you have more than 26 wastes to list.

Continued from the front.

IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

NOT APPLICABLE

V. FACILITY DRAWING

SEE ATTACHED

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

SEE ATTACHED

All existing facilities must include photographs *(aerial or ground-level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment, or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
47 38 08 N	122 22 50 W

VIII. FACILITY OWNER

☐ A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
PORT OF SEATTLE	206 728 3000

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
P.O. BOX 1209	SEATTLE	WA	98111

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
Mic Dinsmore Chief Executive Officer		

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
Jack Wolfin Vice President, Northwest Region		10-7-03

Photo 1 View looking southwest toward the Black Oil Yard, Elliott Bay and downtown Seattle.

Photo 2 View looking north at the Small Yard, Building 19 and the railroad spurs.

Photo 3 View looking west at the center of the Marine Diesel Yard.

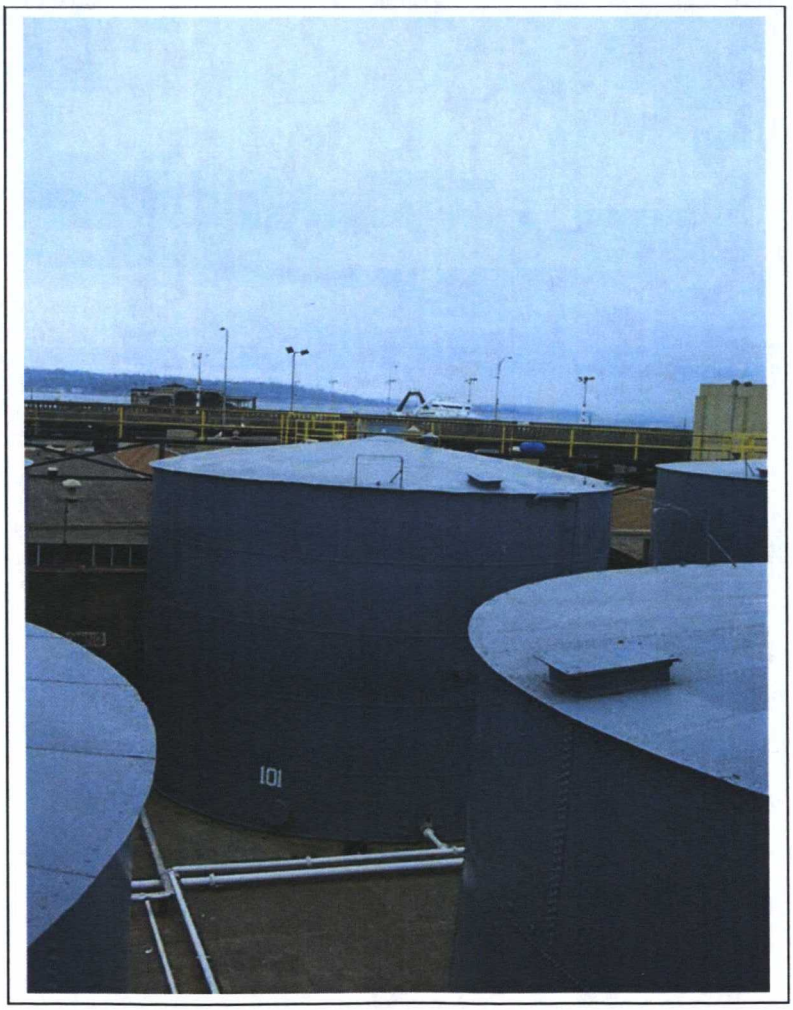


Photo 4 View looking south to southwest at the Black Oil Yard, W. Garfield Street Viaduct, and Elliott Bay beyond.

Photo 5 View looking south at Building M-24.

Photo 6 View looking east at the Small Yard and former Operations Office.

Photo 7 View of the rail spurs located on site, looking north.

Photo 8 View looking south at Building M-19.

Photo 10 View of the fencing and posted danger signs that surround the facility.

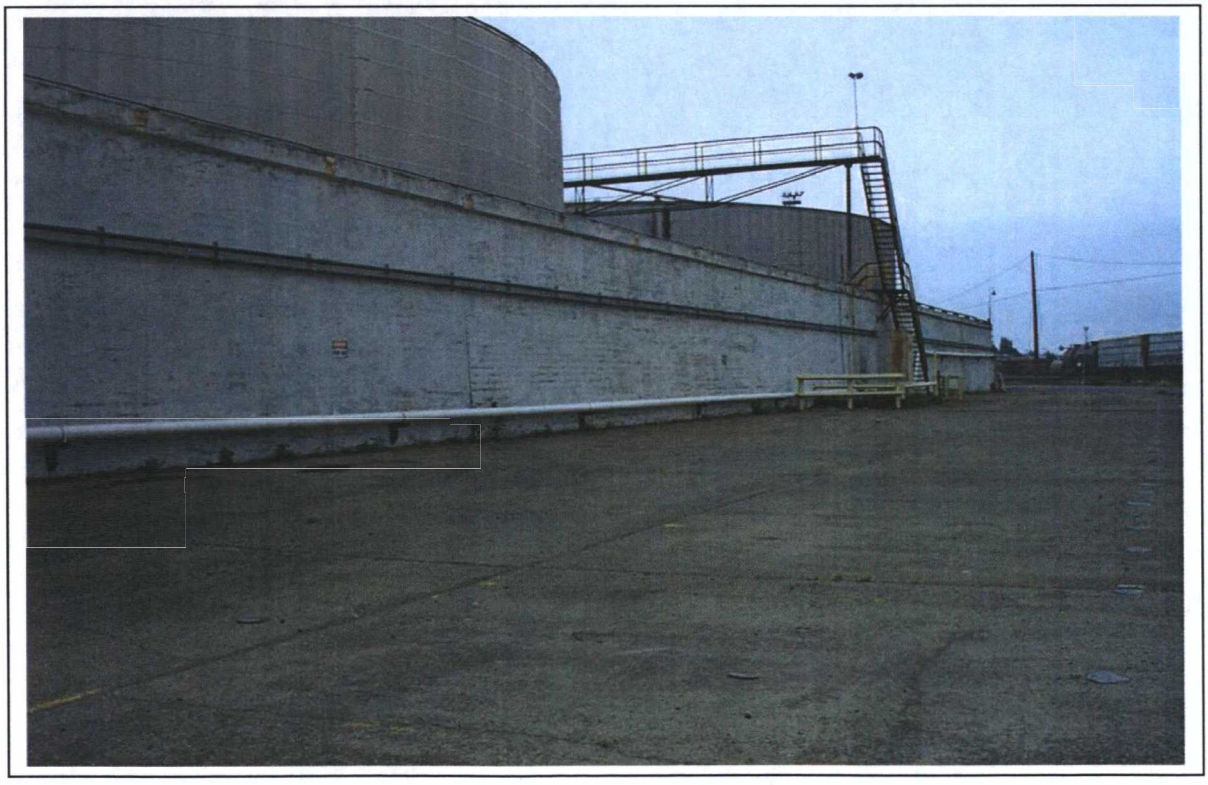


Photo 11 View of the concrete walls that surround the Marine Diesel and Black Oil Yards.

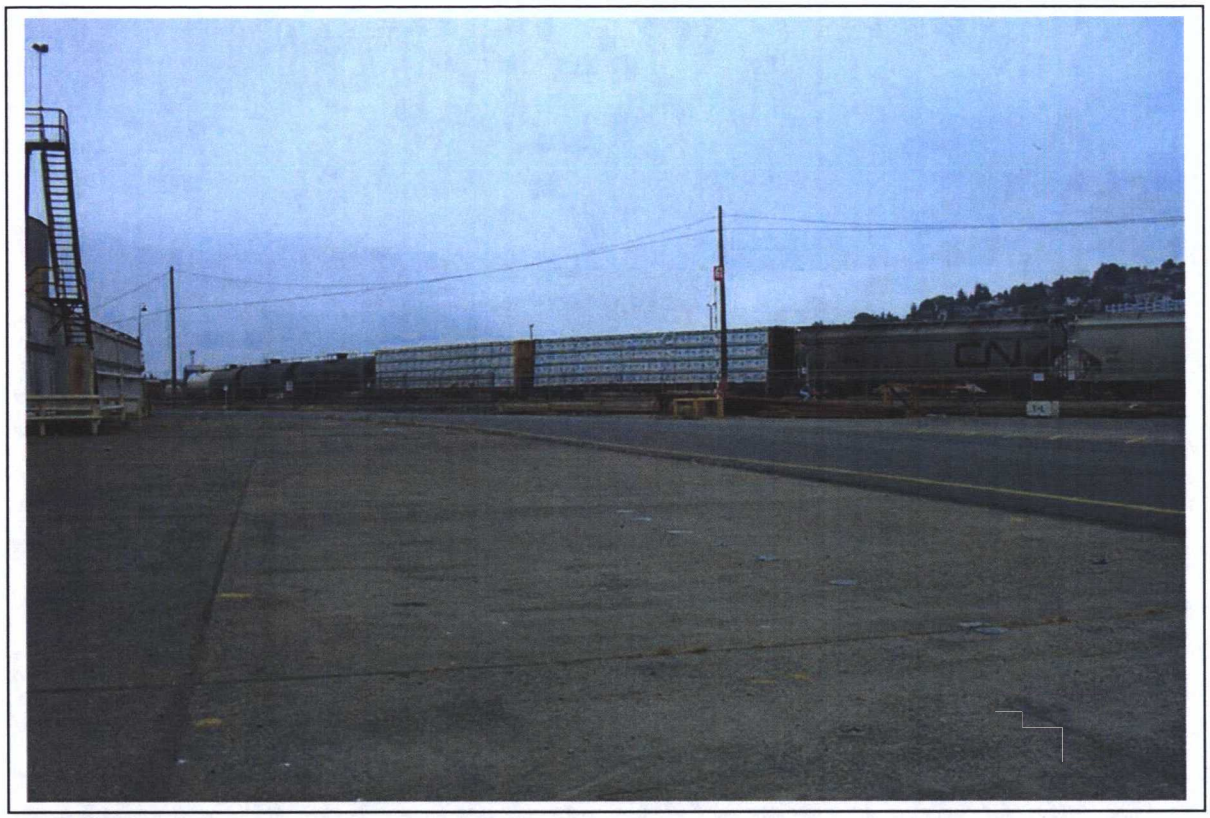


Photo 12 View looking north at the chain-link fence that separates the Tank Farm Lease Parcel from the adjacent rail yard.

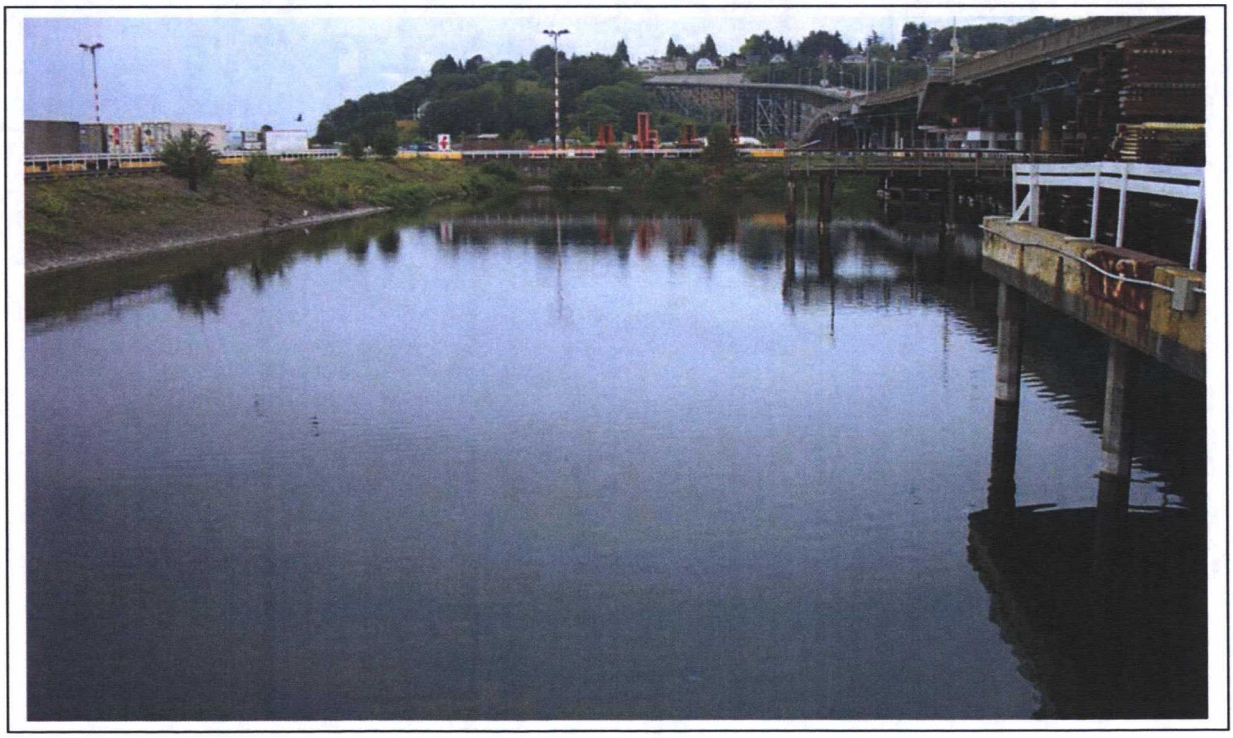
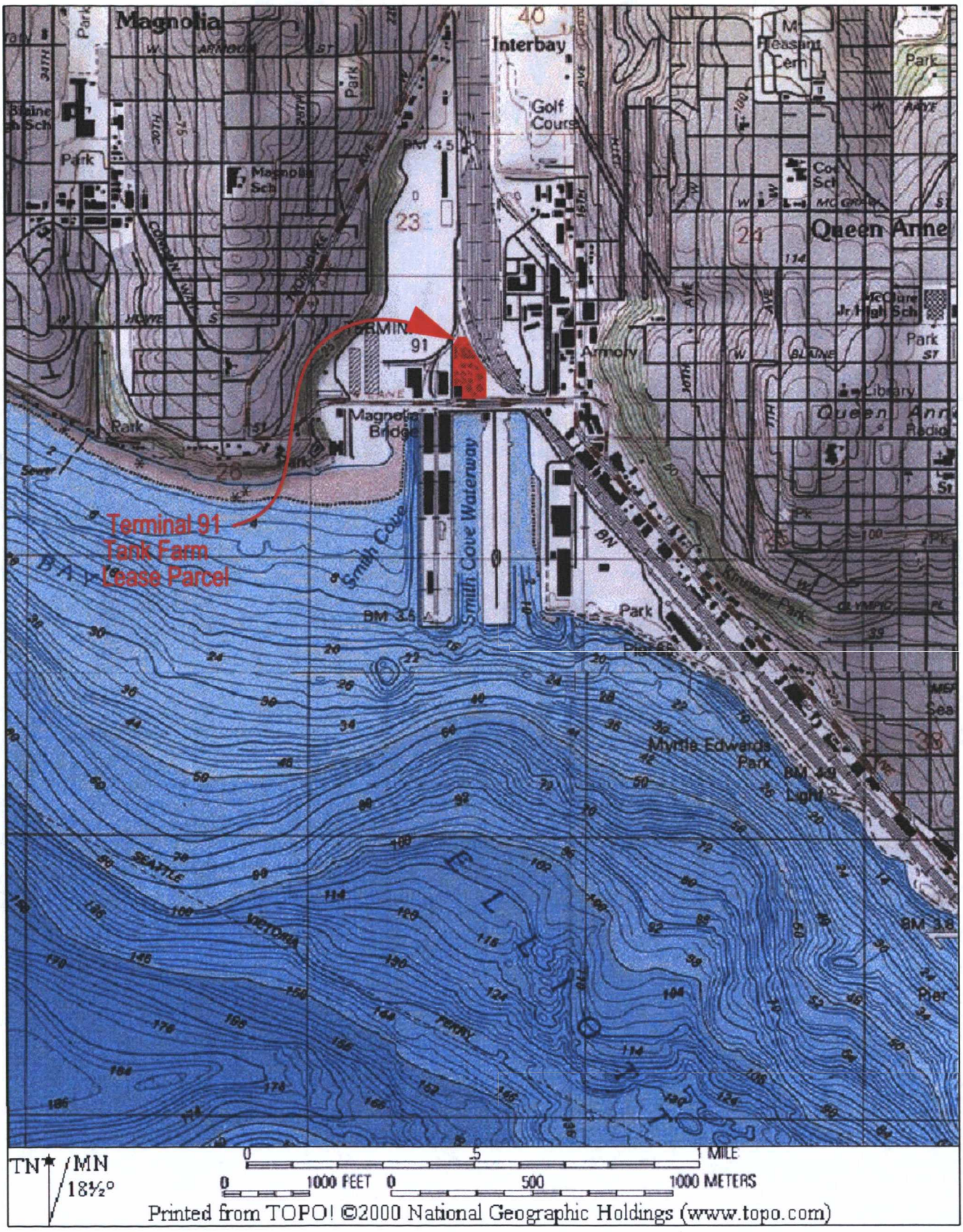
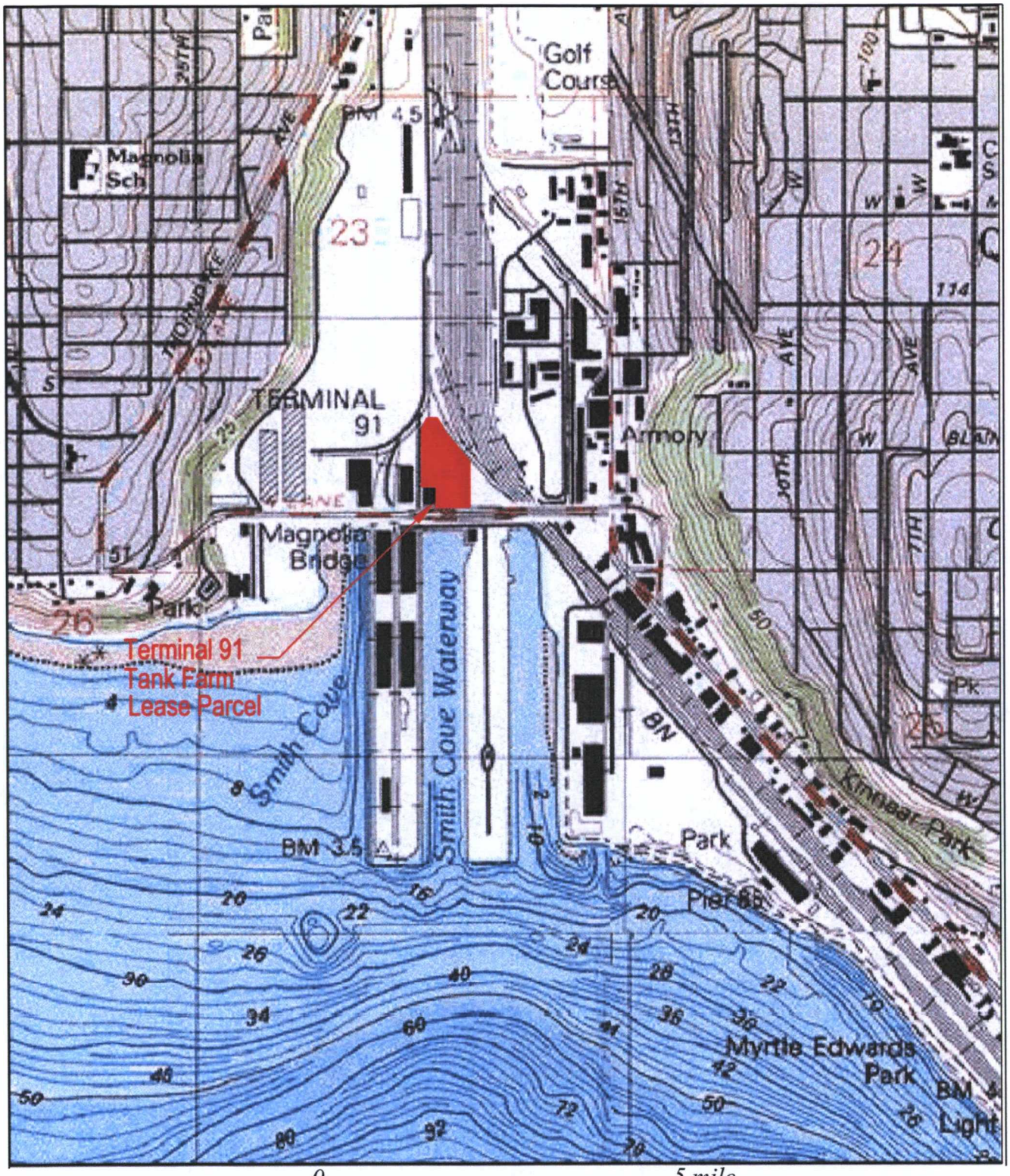


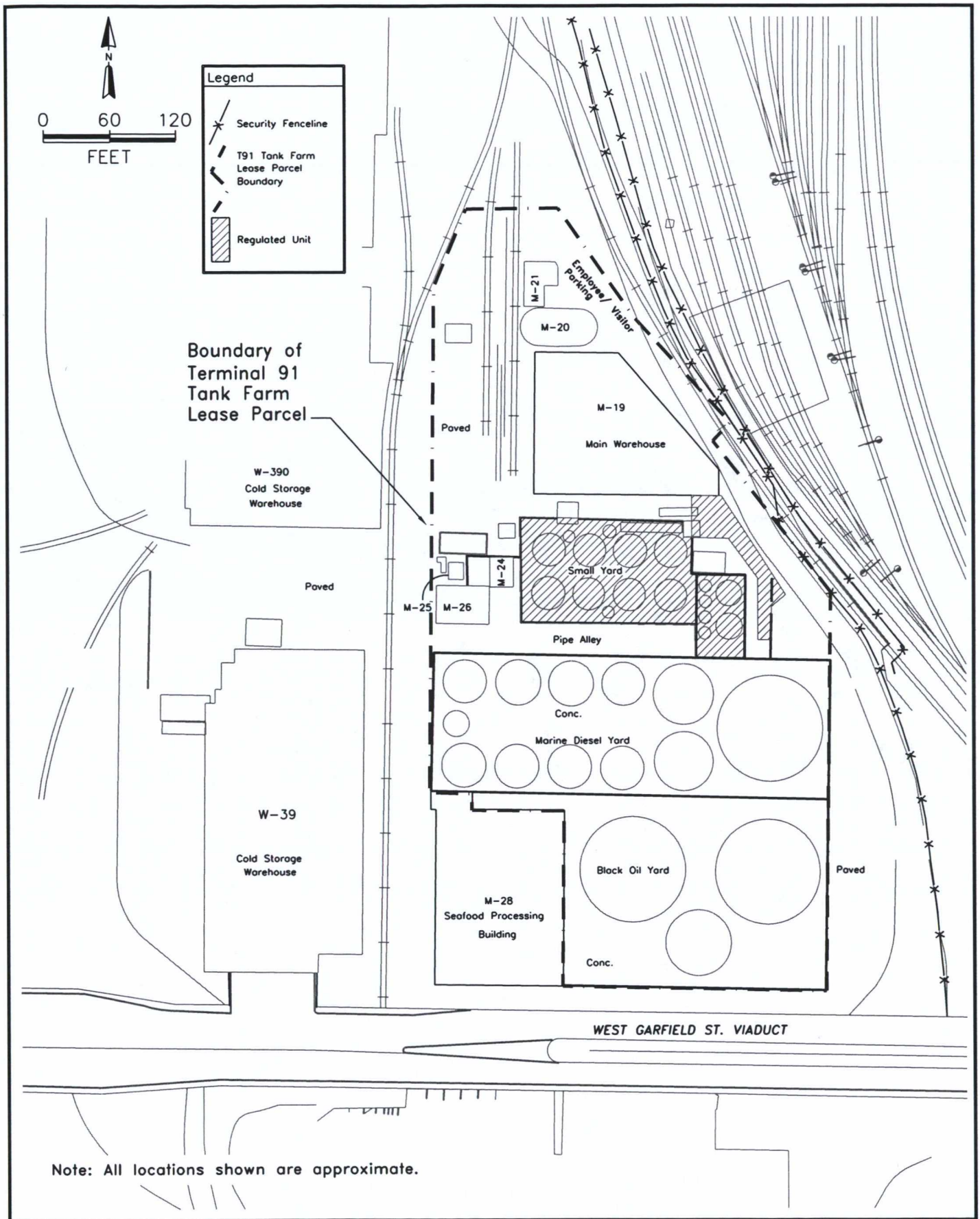
Photo 13 View to the south of the short-fill impoundment for stormwater runoff.



PSC	TITLE: Topographical Map 1 Mile Radius Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	
		DATE: 10/8/03	REV.:	FIGURE NO.: A 1–1



PSC	TITLE: Topographical Map 1/2 Mile Radius Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	
		DATE: 10/8/03	REV.:	FIGURE NO.: A 1-2



PSC	TITLE: Site Plan Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: A 1-3
		DATE: 10/8/03	REV.:	

SECTION B

FACILITY DESCRIPTION AND GENERAL PROVISIONS

TABLE OF CONTENTS

LIST OF FIGURES

B1.0 GENERAL FACILITY DESCRIPTION

40 CFR 270.14 (b) (1), (10), (19)
WAC 173-303-806 (4) (a) (i), (x), (xi), (xviii)
Revised, December 1990, July 1991, November 1991, August 2002

Facility Name	Terminal 91 Tank Farm Site USEPA/Ecology Facility Identification Number: WAD000812917	
Current Site Occupant/Lessee (Note that dangerous waste treatment and storage operations no longer occur at the site, and there are no current tenants.)	Name Address Phone	There are no current tenants at the Tank Farm Lease Parcel. The tank farm is being maintained and monitored by Delta Western as required by spill prevention regulations.
Operator	Name Address Phone	Burlington Environmental Inc., a wholly owned subsidiary of Philip Services Corporation 955 Powell Avenue, SW Renton, WA 98055 (800) 228-7872, (425) 227-0311
Owner	Name Address Phone	Port of Seattle PO Box 1209 Pier 69 Seattle, WA 98111 (206) 728-3000

The Terminal 91 Tank Farm Lease Parcel is located at 2001 West Garfield Street, at the Port of Seattle's Terminal 91 Complex in Seattle, King County, Washington. Refer to Figures B1-1a and B1-1b for site location maps. Land use for the facility is zoned by the City of Seattle as General Industrial Zone 1, with a 45' height limit (IGI U/45). Figure B2-1 shows the zoning for the area surrounding the Terminal 91 Tank Farm Lease Parcel.

The Port is the owner of the Terminal 91 Tank Farm Lease Parcel formerly leased and operated by Burlington, which leased property consisted of three tank yards and

associated buildings located on approximately four acres within the 216-acre "Terminal 91 Complex" as shown on Figures B1-1a and B1-1b. Burlington and the Port terminated the lease for the Tank Farm Lease Parcel and Burlington completed the closure of above-ground treatment and storage units at its permitted operations in approximately 1997. The former Burlington operations at the Tank Farm Lease Parcel were divided into the following general areas, which still exist today, as shown in Figure B1-2:

- The Black Oil Yard
- The Marine Diesel Oil Yard
- The Small Yard
- The Main Warehouse

The Black Oil Yard and the Marine Diesel Oil Yard are surrounded by concrete product-containment walls approximately 15 feet high. All three tank yards are fully paved with concrete. During the period of operations, Burlington used aboveground and subsurface piping systems to transfer product and waste streams within the tank yards. A main warehouse was located just north of the three tank yards.

The Tank Farm Lease Parcel and surrounding area remains situated on relatively flat-lying ground and is covered by either asphalt or concrete, except for a narrow strip of unoccupied space situated between the seafood processing building (Building M-28) and the Marine Diesel Oil Yard.

B1.1 Facility Owner/Operator

Burlington (then known as Chemical Processors, Inc. or "Chempro")[1] leased the Site from the Port beginning in approximately June 1971. Burlington notified USEPA of its dangerous waste activities at the Site on or before November 19, 1980 and was granted interim status under RCRA regulations for its dangerous waste management operations at the Tank Farm Lease Parcel. Thereafter, Burlington was issued a Part B RCRA

[1] In January 1992, Chemical Processors, Inc. changed its name to "Burlington Environmental Inc." Philip Environmental Inc., a Toronto based company, purchased Burlington, and Burlington became its wholly owned subsidiary in December 1993. Philip Environmental Inc. subsequently changed its name to "Philip Services Corporation". Burlington has from time to time conducted business under both the names "Philip Environmental" and "Philip Services Corporation" in recognition of the parent company.

permit effective August 22, 1992 for the continued operation of a permitted dangerous waste management facility at the Tank Farm Lease Parcel until September 1995.

From approximately 1974 through 1995, Burlington also sublet a large portion of the Tank Farm Lease Parcel (the Marine Diesel Oil Yard and the Black Oil Yard) to PNO for storage of non-regulated bunker oil and other fuels product. PNO used above-ground and underground piping systems at the Tank Farm Lease Parcel to transfer bunker oil and fuels within the Tank Farm Lease Parcel and other areas of the Terminal 91 Complex. In September 1995, Burlington ceased operations at the Tank Farm Lease Parcel and terminated its lease with the Port. Burlington commenced above-ground closure of all permit-related facility equipment, secondary containment, and treatment units pursuant to a closure plan approved by Ecology. Burlington submitted an engineer-certified closure report to Ecology documenting completion of all requirements of the surface facility closure plan in 1997. In 2003, Ecology approved the certification of aboveground clean closure that Burlington submitted in 1997.

Following Burlington's surface closure action in 1997, PNO entered a new lease for the entire Tank Farm Lease Parcel and continued operation of its non-regulated bunker oil, lube oil, and fuels product storage and blending facility. Neither the Port nor PNO has conducted permitted dangerous waste operations at the Tank Farm Lease Parcel at any time before or after Burlington ended its operations in 1995. Burlington, the Port and PNO continue to implement corrective action at the Site pursuant to the Agreed Order (No. DE 98HW-N108) effective April 10, 1998.

In 1999, PNO terminated its lease with the Port and discontinued its fuels product and blending operations at the Site. Subsequently, the Port entered into an agreement with Fuel and Marine Marketing ("FAMM"), which conducted bunker oil and fuel product storage, blending and marketing operations at the Tank Farm Lease Parcel until January 2003. FAMM sub-leased the lube-oil portion of the operation to Rainier Petroleum during that time period. Rainier continued to lease a portion of the Tank Farm Lease Parcel until June 2003. Neither FAMM nor Rainier Petroleum engaged in regulated dangerous waste treatment or storage operations at the Tank Farm Lease Parcel. Currently there are no tenants at the Tank Farm Lease Parcel. The tank farm is being maintained and monitored by Delta Western as required by spill prevention regulations.

B1.2 Terminal 91 Complex History

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background information relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.3 Site History

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility. The Agreed Order, which will be incorporated into the final Permit for corrective action at the Facility, contains a complete site history.

B1.4 Materials Historically Handled at the Site

This section has been omitted from the Application as the information requested is no longer applicable. To the extent such information is relevant to corrective action at the Facility, such information is set forth in the Agreed Order and documents prepared in connection with past and present site characterization and corrective action at the Facility. The documents relevant to corrective action at the Facility are set forth in Section E.2.

B1.5 Plant Management

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Site.

B1.6 Summary of Waste Types Listed in the Part A

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.7 Tank Storage and Treatment Operations

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in prior sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.8 Detailed Process/Activity Descriptions

With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

The only other activity at the site related to corrective actions is traffic. In order to perform corrective actions at the site, field teams use the site on approximately a monthly basis to perform maintenance on a passive free-product recovery system, and groundwater monitoring on a semiannual basis. There is infrequent use of the site for other corrective action field projects, which typically occur 1-3 times a year. Figure B2-4 shows the general traffic patterns used for monthly maintenance and monitoring activities. No map is available of the newly constructed exit ramp that extends from Elliott Avenue to the southern guard shack. This is the entrance used most often by field teams. The team travels directly from the guard shack to the access roads on the west, south or east sides of the tank farm.

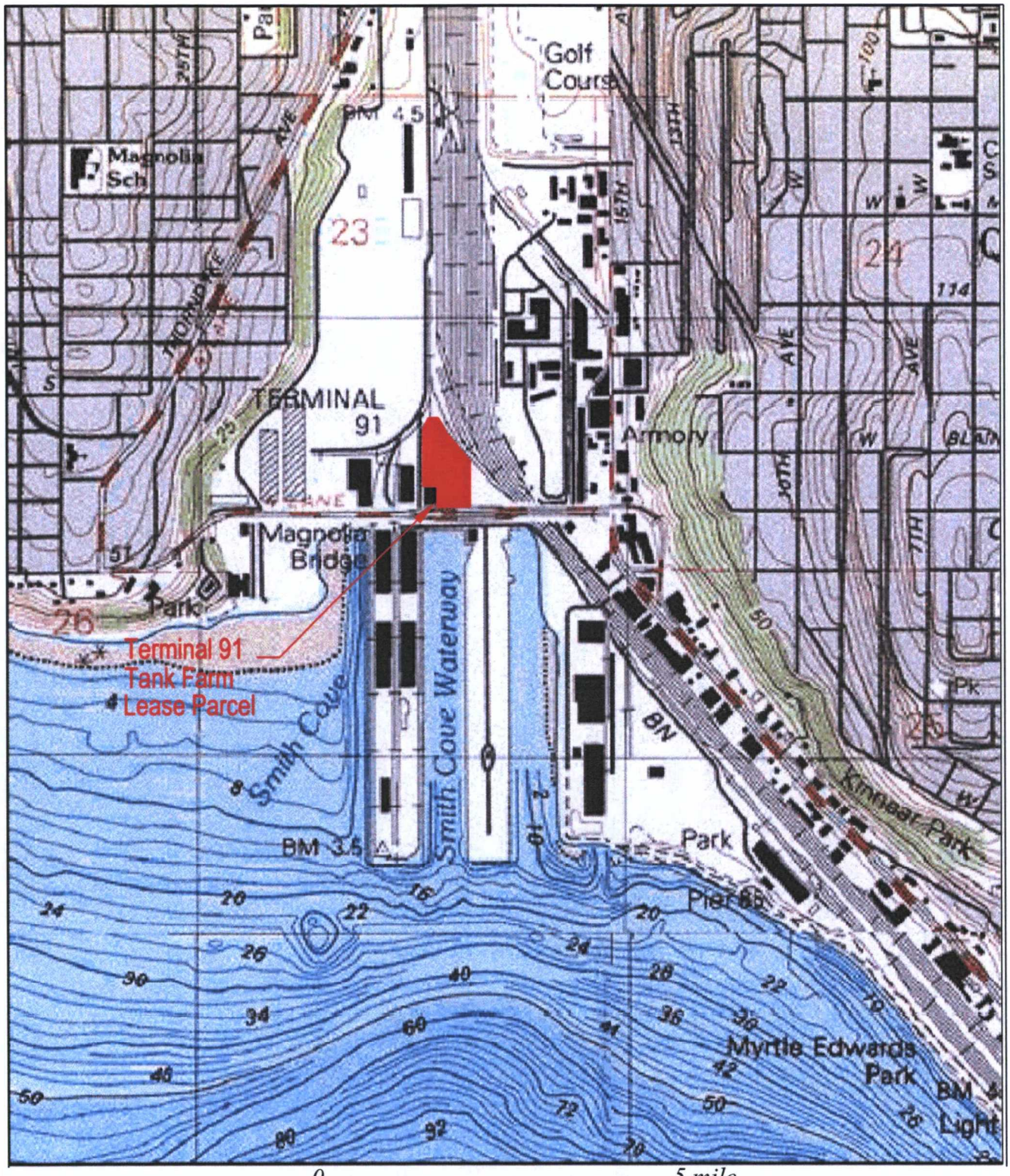
B2.0 TOPOGRAPHIC MAPS

Revised, January 1990, November 1991, August 2002

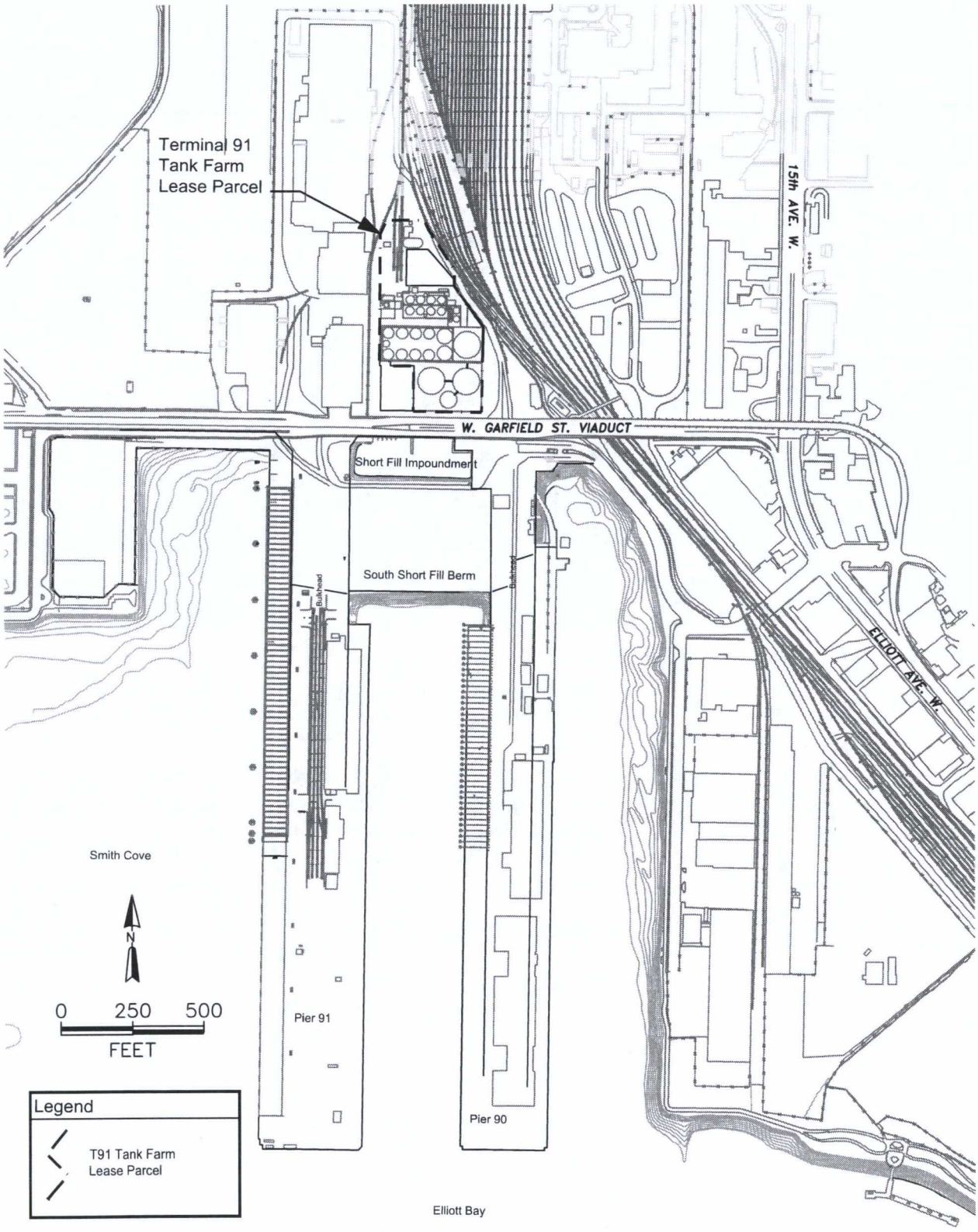
40 CFR 270.14 (b) (19)
WAC 173-303-806 (4) (a) (xviii)

The following figures referenced in this Section B2.0 describe topographic features at the Site in conformance with the topographic requirements cited above revised as of August 2002. Individual figures were provided to reduce the amount of overlapping information. Each figure in this section highlights certain features as follows:

- Figure B1-1 shows the location of the Terminal 91 Complex, in relation to the greater Seattle area and topographic features.
- Figure B1-2 shows the legal boundaries of the Tank Farm Lease Parcel, security features, the main operating areas of the Tank Farm Lease Parcel, and monitoring well locations.
- Figure B2-1 shows the adjacent land use.
- Figure B2-2 shows on-site surface water flow or drainage patterns.
- Figure B2-3 shows the wind patterns including a wind rose of the area near the site.
- Figure B2-4 shows the traffic patterns at the site related to corrective action activities.
- Figure B2-5 shows the 100 Year Floodplain in relation to the Tank Farm Lease Parcel.



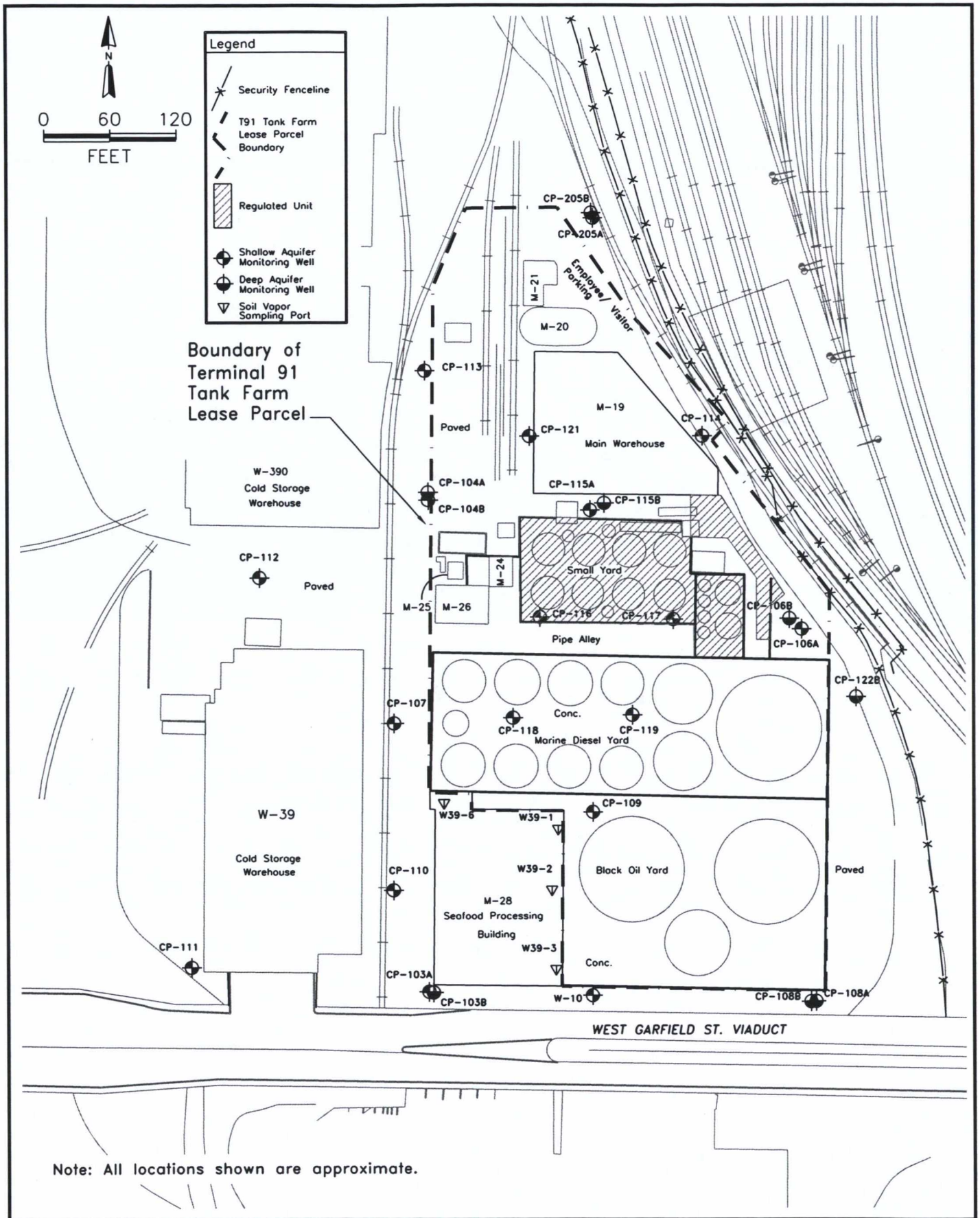
PSC	TITLE: Topographical Map 1/2 Mile Radius Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: B 1–1a
		DATE: 10/8/03	REV.:	



PSC

TITLE:
Location of Terminal 91 Tank Farm
Lease Parcel

DWN: dtb	DES.:	PROJECT NO.: Permit App.
CHKD:	APPD:	FIGURE NO.: B 1-1b
DATE: 10/8/03	REV.:	



Note: All locations shown are approximate.

PSC	TITLE: Site Plan Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: B 1-2
		DATE: 10/8/03	REV.:	

Note: All locations shown are approximate.

N

0 200 400

FEET

Legend

- Demarcates Landuse
- Edge of Surfacewater
- Terminal 91 Tank FArm Lease Parcel

Green Belt

Terminal 91 Tank Farm Lease Parcel

General Industrial

W-390 Cold Storage Warehouse

M-21

M-20

M-19

M-24

M-25

M-26

W-40 Storehouse

W-39 Cold Storage Warehouse

M-28

15th AVE. W.

Green Belt

W. GARFIELD ST. VIADUCT

General Industrial

Tidal Lands

Pier 91

Smith Cove Waterway

Smith Cove Waterway

Pier 90

Smith Cove Waterway

Tidal Lands

ELLIOTT AVE. W.

Industrial Commercial

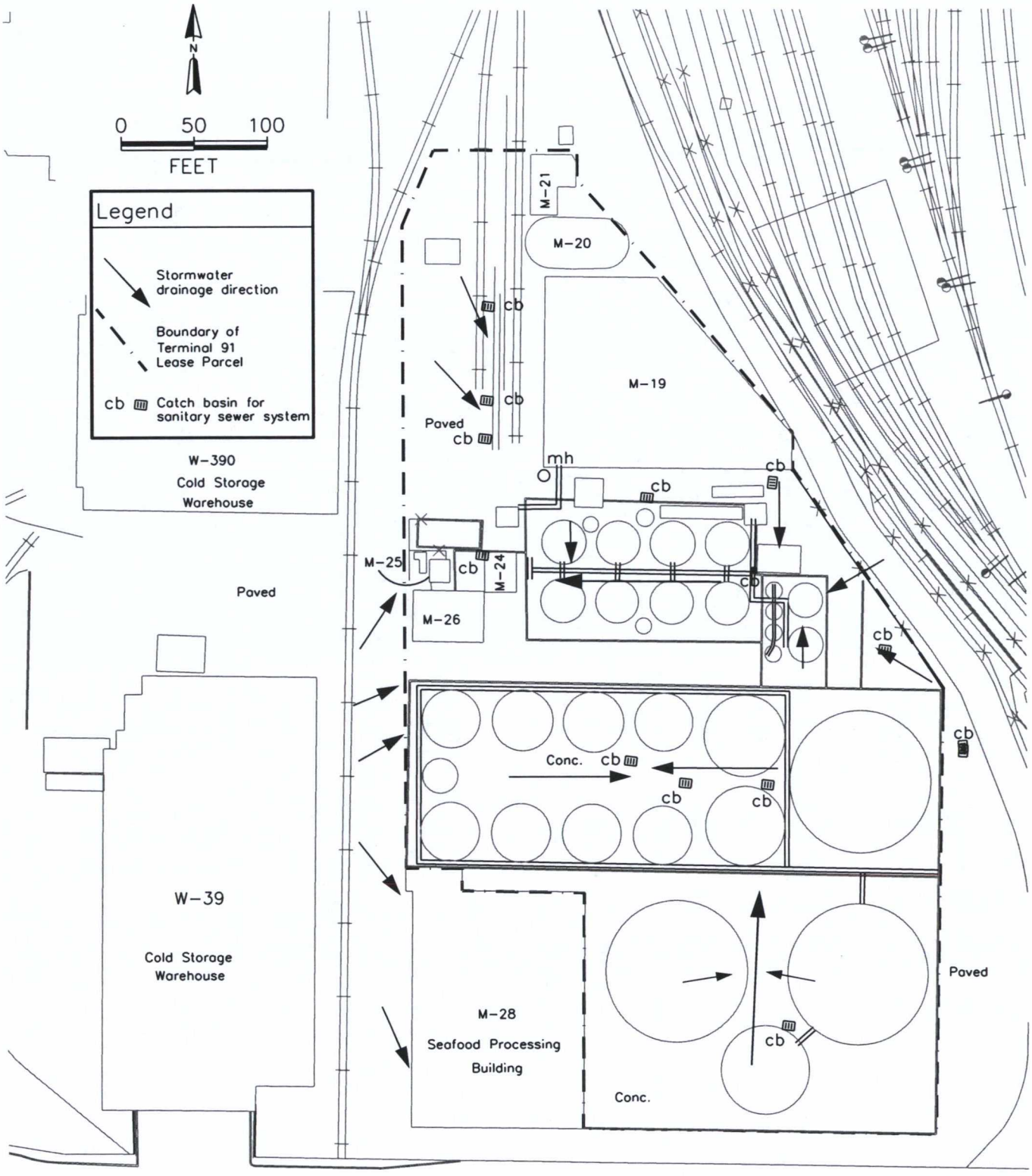
PSC

TITLE:

Adjacent Land Use

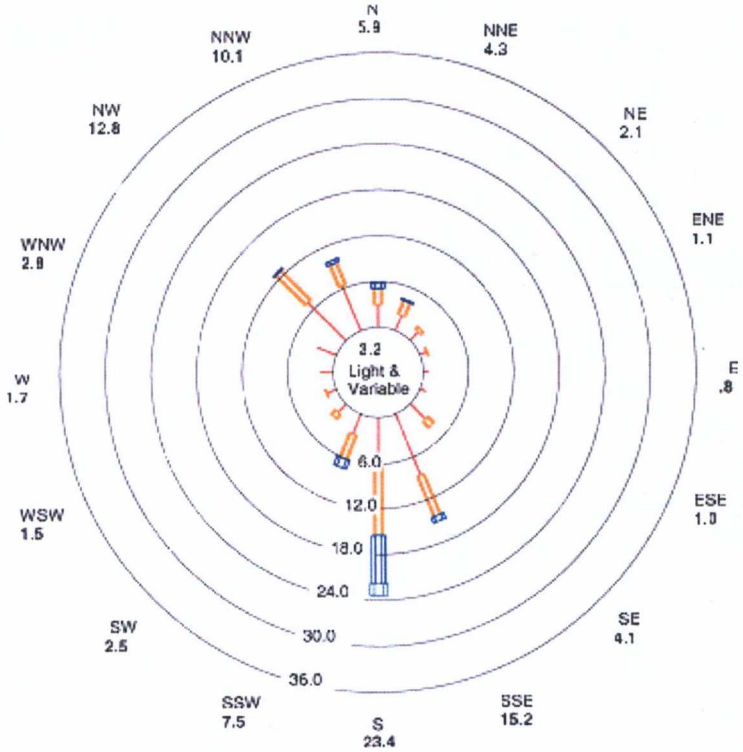
Terminal 91 Tank Farm Lease Parcel

DWN: dtb	DES.:	PROJECT NO.: Permit App.	
CHKD:	APPD:		
DATE: 10/8/03	REV.:	FIGURE NO.: B 2-1	



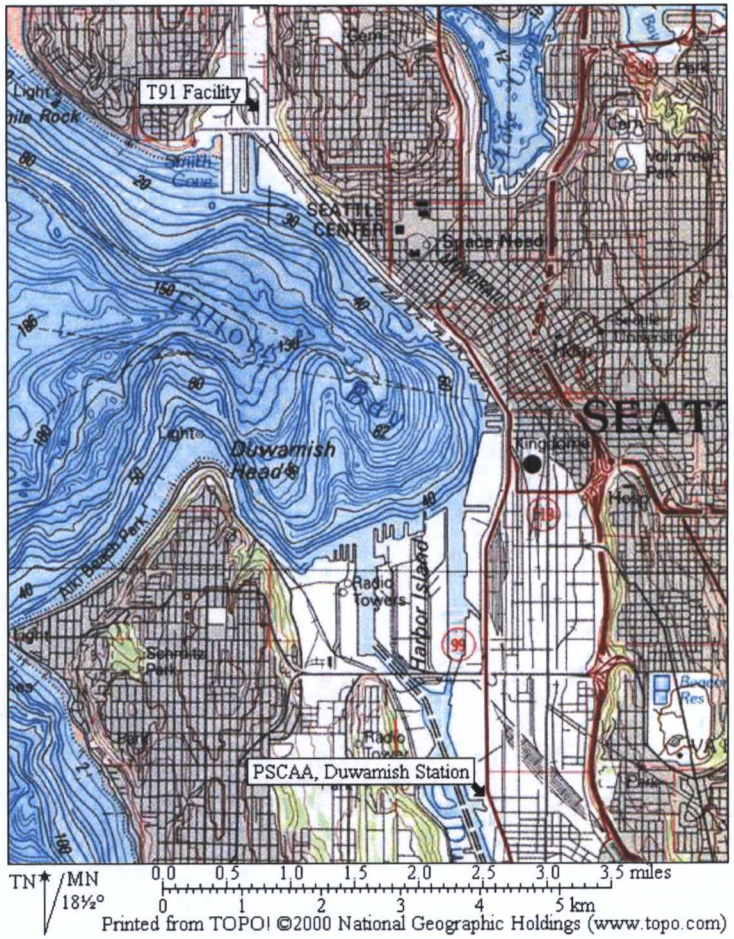
Note: All stormwater on the lease parcel is directed to drainage collection areas and contained for discharge to the METRO sewer system.

PSC	TITLE: On Site Surface Water (Storm Water) Drainage Patterns Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: B 2-2
		DATE: 10/8/03	REV.:	

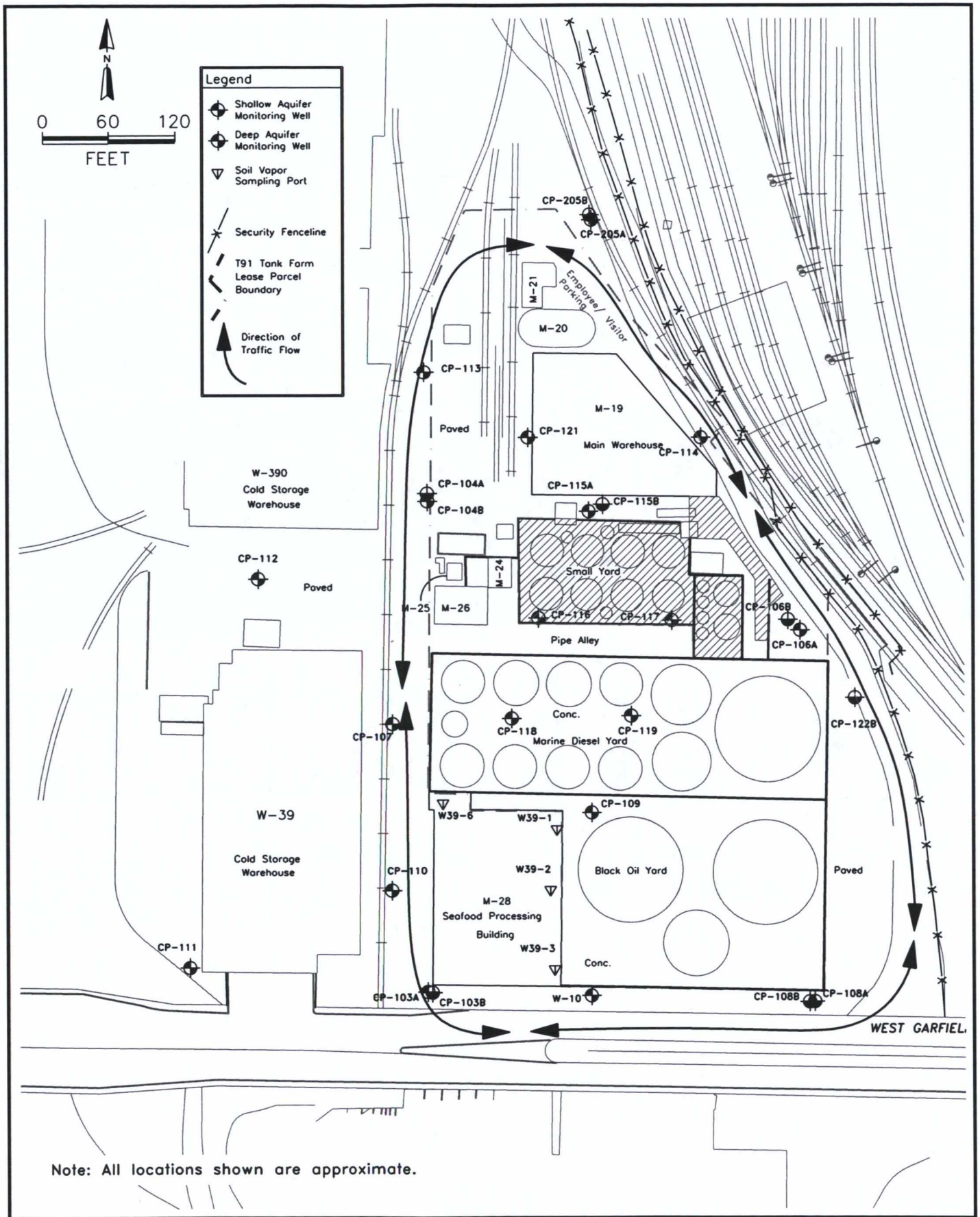


Station Name:
PSCAA, Duwamish Station
Station Location:
4752 E. Marginal Way S. Seattle, Washington
Inclusive Dates:
January 1, 1990 to December 31, 2001
Total Observations:
104,480
Reference:
http://www.pscleanair.org/airq/windrose/duwamish_multi.shtml

Duwamish Station

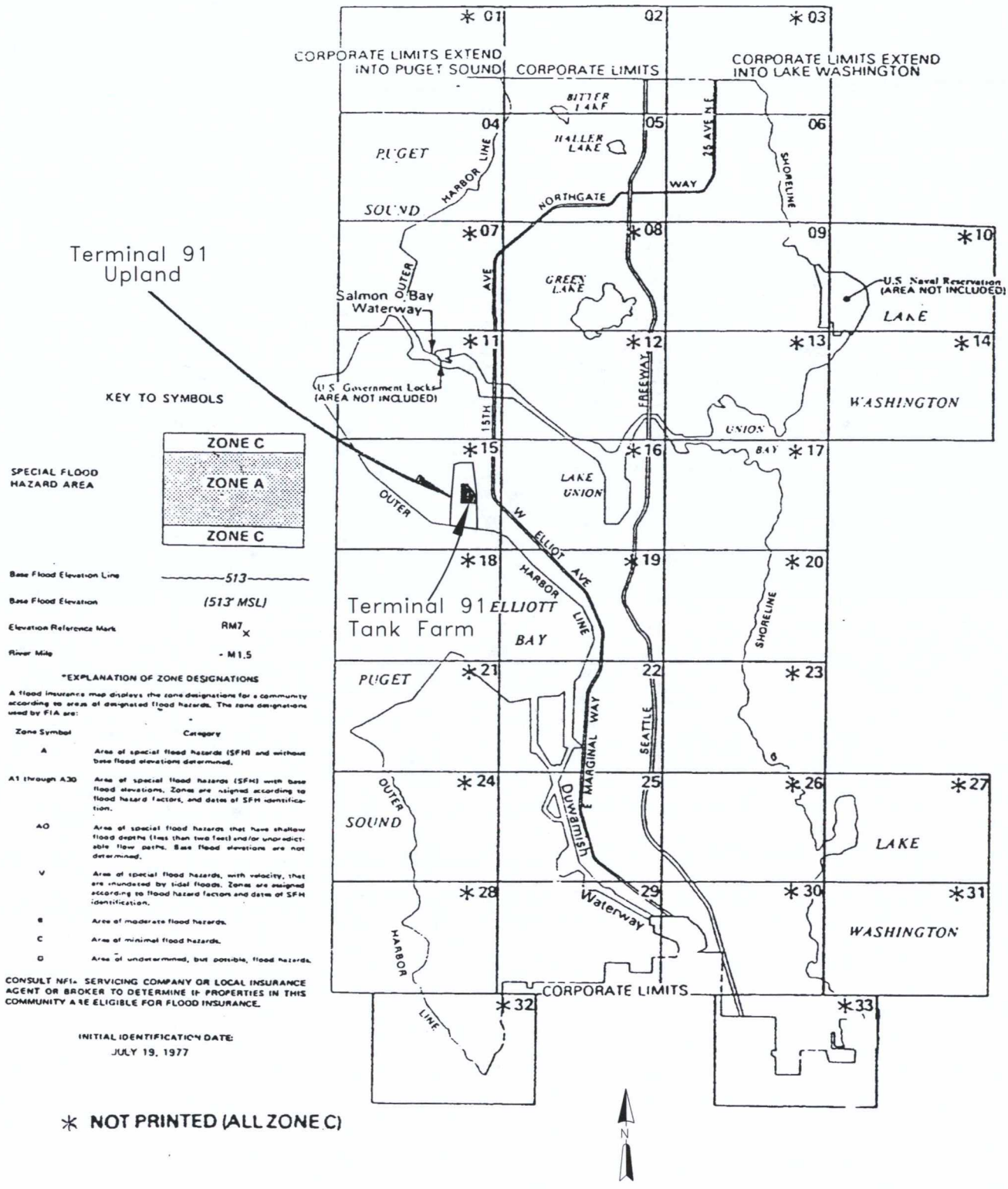


PSC	TITLE: Local Wind Patterns and Vicinity Map Terminal 91 Tank Farm Lease Parcel	DRAWN: dtb	DES:	PROJECT: Permit App.
		DATE: 10/7/03	REV:	FIGURE: B 2-3



Note: All locations shown are approximate.

PSC	TITLE: Traffic Flow Pattern Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: B 2-4
		DATE: 10/8/03	REV.:	



KEY TO SYMBOLS

SPECIAL FLOOD HAZARD AREA

ZONE C
ZONE A
ZONE C

Base Flood Elevation Line — 513

Base Flood Elevation (513' MSL)

Elevation Reference Mark RM7 x

River Mile - M1.5

*EXPLANATION OF ZONE DESIGNATIONS

A flood insurance map displays the zone designations for a community according to areas of designated flood hazards. The zone designations used by FIA are:

Zone Symbol	Category
A	Area of special flood hazards (SFH) and without base flood elevations determined.
A1 through A30	Area of special flood hazards (SFH) with base flood elevations. Zones are assigned according to flood hazard factors, and dates of SFH identification.
AO	Area of special flood hazards that have shallow flood depths (less than two feet) and/or unpredictable flow paths. Base flood elevations are not determined.
V	Area of special flood hazards, with velocity, that are inundated by tidal floods. Zones are assigned according to flood hazard factors and dates of SFH identification.
B	Area of moderate flood hazards.
C	Area of minimal flood hazards.
D	Area of undetermined, but possible, flood hazards.

CONSULT NFIP SERVICING COMPANY OR LOCAL INSURANCE AGENT OR BROKER TO DETERMINE IF PROPERTIES IN THIS COMMUNITY ARE ELIGIBLE FOR FLOOD INSURANCE.

INITIAL IDENTIFICATION DATE:
JULY 19, 1977

* NOT PRINTED (ALL ZONE C)

PSC	TITLE: Flood Plain Designation Map 100 Year Flood Plain Terminal 91 Tank Farm Lease Parcel	DWN: dtb / DES.:	PROJECT NO.: Permit App.
		CHKD: / APPD:	FIGURE NO.: B 2-5
		DATE: 10/8/03 / REV.:	

SECTION C

WASTE CHARACTERISTICS

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

SECTION D

PROCESS INFORMATION

Burlington no longer conducts processing at the Tank Farm Lease Parcel. With information provided in prior sections of this application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

Dangerous wastes have not been generated during ongoing site investigative activities. Light non-aqueous-phase liquid ("LNAPL") containing polychlorinated biphenyls ("PCBs") that is generated from specific monitoring wells onsite is handled and disposed in accordance with the Toxic Substances Control Act (40 CFR 761.60). Until completion of the Feasibility Study and Cleanup Action Plan, the final corrective action requirements for the Site will not be known. However, if dangerous wastes are generated during corrective actions, those wastes will be handled in accordance with the Dangerous Waste Regulations (WAC 173-303).

SECTION E

RELEASES FROM SOLID WASTE MANAGEMENT UNITS

TABLE OF CONTENTS

SECTION E RELEASES FROM SOLID WASTE MANAGEMENT UNITS

806(4)(a)(xxiii) and (xxiv), 645, 646, [270.14 (d)]

The RCRA Facility Assessment ("RFA") that was prepared by the EPA in 1994 identified solid waste management units ("SWMUs") and areas of concern ("AOCs") at the Terminal 91 Complex, including the Tank Farm Lease Parcel. Work in progress under the Agreed Order for the Tank Farm Site addresses only those SWMUs and AOCs that were associated with the Tank Farm Lease Parcel, as identified in the RFA.

Currently, the PLP Group for the Site, as defined in the Agreed Order, is addressing data gaps that were identified during preparation of the 1999 Draft Remedial Investigation/Data Evaluation ("RI/DE") Report. Those data gaps are being addressed under a "Bridge Document" process. The Bridge Document Report 1 ("BDR1") provided a preliminary exposure assessment that identified potential pathways and receptors for contaminants originating from the Tank Farm Lease Parcel, and confirmed that the Site ground water is non-potable under the MTCA regulations. Potential pathways identified included the ground water to surface water pathway and the soil to vapor pathway. A Work Plan for Additional Data Collection ("WPADC") was prepared to further address data gaps under the ground water to surface water pathway, and a Soil Vapor Sampling and Analysis Plan ("SVSAP") was prepared to address the soil to vapor pathway. Work is in progress under both of these plans and is scheduled for completion in early 2004. Also as part of the ongoing work, passive LNAPL recovery devices were placed in onsite monitoring wells and monthly LNAPL recovery activities are being performed.

After investigative activities associated with data gaps have been completed and relevant reports approved by Ecology, a risk assessment, feasibility study, and cleanup action plan will be prepared. Corrective action activities are expected to commence upon completion of the final cleanup action plan.

Work performed by Burlington under EPA oversight prior to the effective date of the Agreed Order is summarized in the following table. All reports were submitted to EPA's Region X office in Seattle:

Order	Work Performed Under EPA Oversight
3013	Phase I Hydrogeologic Investigation (Sweet-Edwards/EMCON 1988)--preliminary site characterization
	Phase II Hydrogeologic Investigation (Sweet-Edwards EMCON 1989)--additional hydrogeologic characterization
3008(h)	RCRA Facility Investigation ("RFI") (BEI 1995)--comprehensive site characterization, including soil sampling and quarterly groundwater monitoring activities through January 1998

Reports of investigative activities that were prepared under the Agreed Order are summarized in the following table. All reports were submitted to the Department of Ecology, Northwest Regional Office:

Reports Prepared Under Ecology Oversight	Date
Draft Remedial Investigation/Data Evaluation Report	January 1999
Final Bridge Document Report 1	November 2001
Piezometer Installation Report	March 2002
Soil Vapor Technical Memorandum No. 2	October 2002
Tidal Study Report	November 2002
Draft Bridge Document Report 2	January 2003

Planned reports and their estimated dates of submittal to the Department of Ecology, Northwest Regional Office, are summarized in the following table. Actual transmittal dates have not been determined; the dates are estimates only based on current available information:

Reports To Be Submitted in the Future	Estimated Transmittal Date
Draft Bridge Document Report 3	March 2004
Final RI/DE Report	September 2004
Draft Risk Assessment and Feasibility Study Reports	September 2005
Draft Cleanup Action Plan	September 2006

E1 Releases

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility and the surrounding upland portion of Terminal 91 that is undergoing corrective action under this Permit.

All information relating to the locations where solid wastes have been managed on the Tank Farm Lease Parcel was provided in the Solid Waste Management Report (EPA, 1988), which is the equivalent to a RCRA Facility Assessment. All locations where dangerous wastes were stored are shown on Figure B1-2 as "regulated units".

E2 Status of Corrective Actions

In 1994, a Resource Conservation and Recovery Act ("RCRA") Facility Assessment ("RFA") was completed by the U.S. Environmental Protection Agency ("EPA"). The RFA was part of the RCRA process for implementing corrective action at the dangerous waste treatment and storage facility located at the Tank Farm Lease Parcel at the Terminal 91 Complex. The RFA was expanded to include 124 acres of upland property at the Terminal 91 Complex owned by the Port, including the Tank Farm Lease Parcel. That upland property, excluding the Tank Farm Site, is sometimes referred to as the "upland" portion of Terminal 91. The upland portion of Terminal 91 was included in the RFA because the regulatory definition of "facility" for the purposes of corrective action includes contiguous property under control of the owner or operator of the dangerous waste treatment and storage facility. The RFA identified and labeled a number of SWMUs and AOCs on the "upland" area and at the Tank Farm Lease Parcel that were present when the visual site inspection was performed on October 20 and 21, 1992 by EPA representatives.

Following the RFA, Ecology divided the cleanup of the Terminal 91 "facility" into two different processes. The cleanup of the Tank Farm Lease Parcel was provided for through an agreed order ("Agreed Order"). The Agreed Order took effect in April 1998, and was signed by Ecology, the Port, Burlington and PNO. The Agreed Order requires

the Port, PNO and Burlington to investigate and cleanup releases that originated from the Tank Farm Lease Parcel, which is defined by the Agreed Order as follows.

> Tank Farm Lease Parcel consists of three tank yards and associated buildings and covers approximately 4 acres within the Terminal 91 Complex as shown in Exhibit 2 [of the Agreed Order].

The Agreed Order requires cleanup of the "Site," which it defines as:

> The Tank Farm Lease Parcel and areas where releases of dangerous constituents originating from the Tank Farm Lease Parcel operations have come to be located.

In a separate but related effort (noted in the Agreed Order), cleanup of releases at the upland area of the Terminal 91 Complex that were not related to the operations of the Tank Farm Lease Parcel are being addressed by the Port through Ecology's Voluntary Cleanup Program. The cleanup of these releases has been referred to informally as the "T91 Upland Cleanup."

Permit requirements for corrective action under these two processes are summarized separately below, first with respect to corrective action for the "Site" under the Agreed Order, and then with respect to corrective action of the "Upland" under the MTCA Voluntary Cleanup Process. A summary of these activities is provided in Section E2.1.

Site Cleanup. As mentioned in Section B of this permit renewal Application, Burlington, the Port, and PNO are implementing corrective action requirements at the Site under Ecology supervision pursuant to the Agreed Order. The Part B permit contains the following condition, added through a permit modification in June 1998, to provide for corrective action of the Site.

> VI.B.1. State Corrective Action Order number *DE 98HW-N108*, effective April 10, 1998, and its attachments (including any submittals approved, or any amendments or changes to any plans, reports, or schedules) are incorporated by reference and shall be taken and considered as a part of

this permit the same as if they were fully set out therein. Order number *DE 98HW-N108* addresses the State Remedial Investigation and Feasibility Study (RI/FS) and the Draft Corrective Action Plan (CAP) requirement(s) of corrective action using RCW 70.105D; Hazardous Waste Cleanup-Model Toxics Control Act. Corrective action requirements are included in the order in a Schedule of Compliance as required by WAC 173-303-646(2)(c); Corrective Action. The order is included as an attachment to this permit modification.

Upland Cleanup. The Port and Pacific Northern Oil Corporation are conducting corrective action with respect to the Upland portion of the Terminal 91 Complex pursuant to the following condition in the Part B Permit:

> VI.B.2. The "Facility", for the purposes of RCRA corrective action, covers approximately 124 acres of the upland area at the Port of Seattle's Terminal 91. The state corrective action order is for the tank farm lease parcel and areas where releases of dangerous constituents originating from the tank farm lease parcel have come to be located. The tank farm lease parcel is approximately 4 acres. The remaining upland acreage will be investigated and remediated under the state's independent remedial action process as provided for in WAC 173-340-510. If this independent remedial action fails to provide the necessary protection of human health and the environment, the Department reserves the right to issue a state corrective action order that would cover the remainder of the upland area at Terminal 91.

To implement this corrective action requirement for the upland portion of the facility, the Port entered Ecology's Voluntary Cleanup Program pursuant to its VCP application dated March 10, 1999 and accompanying cover letter.

E2.1 Summary of RI/DE Findings

The Remedial Investigation Data Evaluation (RI/DE) Report, prepared and submitted to Ecology in 1999 pursuant to the Agreed Order, summarizes and analyzes investigative information collected by the parties to the Agreed Order. In addition, the RI/DE Report identifies data gaps, provides an evaluation of the horizontal and vertical extent of

contamination at the Site, and discusses potential sources of contamination and potential contaminant transport mechanisms at the Site. This Report includes soil, groundwater, and storm drain sediment data collected at the Site through January 1998.

The nature and extent of light nonaqueous phase liquids ("LNAPL") accumulation and contaminants identified in soil and impacted groundwater at the Site is consistent with historic spills and releases related to numerous fuel-related and waste management operations at the Site. Total petroleum hydrocarbons ("TPH") and Benzene/Toluene/Ethylbenzene/Xylene ("BTEX") compounds represent the most widely distributed group of contaminants detected in studies at the Site. Volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs), polychlorinated biphenyls ("PCBs"), and metals have been found to occur in lesser concentrations and locations throughout the Site. In general, the greatest impacts to soil and groundwater occur beneath the tank yards within the Site.

The results of the groundwater monitoring program indicate that the distribution and concentrations of contaminants in groundwater beneath the Site have stabilized over time, with no significant fluctuations observed in the recent distribution or concentrations of contaminants in groundwater beneath the Site. However, a comparison between findings set forth in the RI/DE Report and the objectives identified in the Agreed Order showed the following data gaps:

1. Horizontal distribution of chemicals at the Site. The vertical distribution of chemicals at the Site appears to have been adequately characterized in prior studies. However, the horizontal extent of impacted soil and groundwater appears to extend beyond the boundaries of the monitoring network. Burlington, the Port and PNO, all parties to the Agreed Order and designated as potentially liable parties ("PLPs") therein, have proposed incorporation of available data from adjacent properties into the existing data set to further define the horizontal extent of contaminants emanating from the Site.
2. Recommendations for revisions to the current groundwater monitoring program. The PLPs intend to use historical groundwater monitoring data, and information gathered through incorporation of data from adjacent properties to evaluate the current groundwater monitoring program and recommend appropriate revisions. The PLPs will prepare a comprehensive Groundwater Sampling and Analysis plan for the Site that includes identification of the proposed monitoring network, well

purging sampling procedures, sample frequency, and proposed revisions to the current analytical methodology, as appropriate.

3. Identification of potential offsite source areas. The PLPs will assess information generated through incorporation of available data from adjacent properties to evaluate potential source areas located outside the boundaries of the Site.

4. Evaluation of the volume of LNAPL accumulations. The PLPs have characterized adequately the horizontal extent of LNAPL accumulations on the Shallow Aquifer beneath the Site. However, insufficient data is available to fully assess the actual volume and potential recoverability of these LNAPL accumulations. The PLPs have recommended performing a series of bail-down tests in wells with historic LNAPL accumulations to generate additional data to assess the actual volume of LNAPL available for potential recovery.

5. Expanded Beneficial Use Survey. The PLPs have recommended evaluation of existing data to establish the maximum beneficial use of groundwater potentially impacted by historical operations at the Site. (Note that this work already was performed and the results were described in the Proposed Final Bridge Document Report 1 dated November 21, 2001 (Roth Consulting 2001).

E2.2.1 Summary of Corrective Action Activities under the Agreed Order from 1998 to Present.

As a result of identifying the data gaps described in prior sections of this Application, the PLPs proposed additional work under Section V.4 of the Agreed Order. In June 1999, the PLPs submitted a letter to Ecology summarizing the proposed additional work, which would be identified as "Bridge Document" work. At a subsequent meeting with Ecology to discuss the approach, the PLPs recommended that a piezometer be installed in the area between the Site and the Pier 89/90 Slip, and that a "Bridge Document" be prepared to evaluate existing site data with respect to potential cleanup activities. Based upon the significant data collected in prior groundwater monitoring at the Site, the PLPs also proposed a reduction in groundwater monitoring events from quarterly to semiannually. The PLPs and Ecology agreed to the terms of a reduced groundwater monitoring program, the installation of a piezometer, and the concept of the Bridge Document work. The terms of the revised groundwater monitoring program are contained in a letter to Ecology dated September 17, 1999 (Roth Consulting). A

Proposed Piezometer Work Plan (Roth Consulting, 2000) was submitted to Ecology on August 21, 2000. The Bridge Document Work Plan (Roth Consulting, 2000) was submitted to Ecology on October 15, 2000.

The primary objective of the Bridge Document work was to optimize data collection activities so that future efforts can focus on site-specific cleanup goals. The approach for achieving this objective included the following tasks:

- Identify potential exposure pathways at the Site.
- Develop preliminary cleanup levels based on site-specific potential exposure pathways and potential cleanup alternatives.
- Identify data gaps that exist with respect to site-specific potential exposure pathways and potential cleanup alternatives.
- Collect additional data as necessary to address site-specific exposure pathway concerns and potential cleanup alternatives.

The first deliverable under this plan was the Proposed Final Bridge Document Report 1 (BDR1) (Roth Consulting, submitted to Ecology on November 21, 2001). This report summarized the work completed as of that date and proposals for subsequent work.

The work completed under the BDR1 included:

- Installation of two new piezometers southeast of the Site;
- Completion of a groundwater beneficial use study;
- Preliminary screening of exposure pathways;
- Development of groundwater screening levels based on site-specific exposure pathways; and
- Assessment of potential points of compliance for groundwater cleanup.

The Bridge Document Report 1 ("BDR1") provided a preliminary exposure assessment that identified potential pathways and receptors for contaminants originating from the Tank Farm Lease Parcel, and confirmed that the Site ground water is non-potable under

the MTCA regulations. Potential pathways identified included the ground water to surface water pathway and the soil to vapor pathway. Ground water screening levels considered included federal and state surface water quality criteria and MTCA Method B surface water cleanup levels.

Subsequent work proposed in the Bridge Document included:

- Investigate the potential for volatilization from soil to indoor air as a pathway of concern at the Site;
- Conduct a background comparison for metals in groundwater detected at the Site;
- Complete a data evaluation to determine which data should be used for future risk based decisions; and
- Evaluate concentrations of chemicals of potential concern ("COPCs") in existing downgradient wells in the area of Terminals 90 and 91 downgradient of the Site to identify potential exceedances of groundwater screening levels which may be distinct and significant sources contributing to contamination in the area.

In May 2001, the PLPs submitted a Draft Soil Vapor Sampling and Analysis Plan (SAP) (PSC, 2001) to Ecology. VOCs were identified as the primary contaminants of concern with respect to the soil to vapor pathway. Figures showing the extent of these contaminants in groundwater were provided in the SAP. The PLPs implemented the plan in August 2001. This included installation of three permanent soil vapor ports in the Seafood Processing Building (Building M-28). This building represented the potential worst-case scenario for the soil to indoor air pathway. The soil vapor results exceeded MTCA air cleanup standards, but when modeled to indoor air levels, the concentrations were well below risk-based screening levels. These data were summarized in the Soil Vapor Technical Memorandum No. 1 (PSC, 2001) submitted to Ecology in December 2001. The SAP required a second round of sampling to verify the results. Before the first quarter sampling occurred, Ecology requested some modifications to the SAP and subsequent report. Ecology required the PLPs to install another soil vapor port at the northwest end of the subject building. Following installation of the additional port, PLPs collected the second round of soil vapor samples in March 2002. Again, the soil vapor results exceeded MTCA air cleanup standards.

But when results were compared to modeled indoor air levels, the concentrations were well below risk-based screening levels. In addition, the modeled soil vapor data were compared to modeled groundwater data, modeled soil data, and estimated indoor air concentrations using an attenuation factor of 0.001. All scenarios showed the soil vapor to indoor air pathway does not pose an unacceptable risk for this Site. The data are summarized in the Soil Vapor Technical Memorandum No. 2, which was finalized in June 2003 (PSC, 2003) and approved by Ecology in July 2003.

A tidal study also was performed in the summer of 2001 to assess the tidal influence in the area between the Tank Farm Lease Parcel and the downgradient wells that were installed in early 2001. A report of those findings was transmitted to the Department of Ecology, Northwest Regional Office, in November 2002.

The PLP Group submitted the Draft Bridge Document Report 2 (BDR2), to Ecology in January 2003. That report included:

- An update of groundwater screening levels and an updated COPC list
- A comparison of groundwater COPC concentrations with groundwater screening levels
- Recommendations for additional work to be performed as part of the BDR3, including LNAPL baildown tests to assess the recoverability of LNAPL at the site
- A groundwater sampling and analysis plan
- A work plan for additional data collection.

Polynuclear aromatic hydrocarbons ("PAHs") and metals were identified as the primary contaminants of concern with respect to the groundwater to surface water pathway. Figures showing the extent of these contaminants in groundwater were provided in the 2002 Annual Groundwater Monitoring Report (PSC, 2003).

The PLPs are performing the work recommended in BDR2 under the Work Plan for Additional Data Collection, and the findings will be reported in Bridge Document Report 3 in early 2004. The PLPs anticipate that all information necessary to fill the existing data gaps will have been determined such that the PLPs may prepare a final RI document and/or begin preparation of a draft feasibility study.

E2.3 Status of Corrective Action at the Terminal 91 Upland from 1997 to Present

This section describes the corrective action activities that have been performed by the Port and/or its tenants at the upland portions of the Terminal 91 Complex as part of the Voluntary Cleanup Program ("VCP"). The activities described begin with the preparation of the Terminal 91 Baseline Report (Kennedy/Jenks 1997) prepared by the Port in response to a request from Ecology. That report summarizes the investigative and remedial activities the Port performed prior to April 1997, exclusive of the Site, and including a description of relevant SWMUs and AOCs that had been identified in the 1994 EPA RFA.

After submission of the Baseline Report, the Port and Ecology agreed further action was required on the following SWMUs, AOCs, and other areas where conditions indicate past releases:

- SWMU 30—Pipeline Break
- AOC 2—Tanks A-G
- AOC 6—Hydrocarbon Contamination, Building 40
- AOC 7—Concrete Aprons/1991 Soil Investigation for Pier 90 Chill Facility
- AOC 9—Contaminated Soil NW Corner of Pier 91
- AOC 11—Old Tank Farm
- 1994 DAS Utility Trench Investigation
- 1996 PNO Pipeline Alignment Soil Remediation, Pier 90
- 1996 PNO Pipeline Break, Pier 91.

The SWMUs and AOCs were identified in the 1994 RFA report. The other areas where conditions indicate past releases were identified in the Terminal 91 Baseline Report (Kennedy/Jenks Consultants 1997).

In June 2000, the Terminal 91 Upland Independent Cleanup Proposed Work Plan No. 1 (Roth Consulting 2000) was transmitted to Ecology. That Work Plan identified activities the Port and/or its tenants will perform to address the areas considered to have the highest priority for initial work due to their locations downgradient of the Tank Farm Lease Parcel. As part of the work described in that Work Plan, five downgradient groundwater monitoring wells were installed in early 2001, and a tidal study was performed in conjunction with the tidal study at the Site (described above). Reports of those activities were provided to Ecology in the Downgradient Well Installation Report (Roth Consulting 2002) and the Tidal Study Report (Port of Seattle 2002).

PNO performed additional evaluation of the area around SWMU 30, a historic pipeline break on Pier 91 just west of the short fill impoundment. Their work has included collection of ground water samples from existing wells and periodic removal of LNAPL from those wells, as described in the table Proposed Additional Work (Roth Consulting 1998).

The Port plans to collect groundwater samples from the seven groundwater monitoring wells at AOC2 in October 2003 to assess groundwater conditions at the site of former underground storage tanks.

Semiannual project status reports also are provided to Ecology under the VCP as part of Ecology's requirements for corrective action at the Terminal 91 Upland.

SECTION F

PROCEDURES TO PREVENT HAZARDS

TABLE OF CONTENTS

SECTION F. PROCEDURES TO PREVENT HAZARDS

F1.0 Facility Security Procedures and Equipment

F1.1 Barrier and Means to Control Entry

40 CFR 264.14(b)(2)(i),(ii), 270.14(b)(4)
WAC 173-303-310(2)(c), 806(4)(a)(iv)

Burlington no longer conducts any operations at the Tank Farm Lease Parcel, except as required by the Agreed Order for corrective action. For purposes of this Application and the Agreed Order, the Tank Farm Lease Parcel is surrounded by a barrier wall (concrete walls and a six-foot-high chain link fence). The Port controls all ingress and egress from the Tank Farm Lease Parcel area through a security gate staffed by Port personnel. Exits and entrances are located to control traffic flow and to provide for emergency escape. See, Figure B1-2, Site Plan. The Tank Farm Lease Parcel is illuminated at dark by automatic outdoor lighting.

Parking for visitors/employees is north of the former Site Warehouse/Office Building 19. The Port closes and locks all gates providing access to the Site after operating hours.

The Port provides 24-hour controlled access to the Terminal 90 and 91 Complex. All entrances are manned by guards that also periodically patrol the area of the Site.

F1.2 Warning Signs

40 CFR 264.14(c)
WAC 173-303-310(2)(a)

Signs printed with the legend, "Danger - Unauthorized Personnel Keep Out" are posted on the gates and approximately every 50 feet along the perimeter fence of the Terminal 90 and 91 Complex. The demographics of the City of Seattle do not indicate a need for warning signs in languages other than English. The signs are visible from any approach to the Site and legible from a distance of 25 feet. They are attached to the fence and gates at a height of approximately five feet.

SECTION G
CONTINGENCY PLAN

Burlington has ceased all operations at the Site, except as required by the Agreed Order, and, therefore, the information requested in this section of the Application is no longer applicable.

SECTION H

TRAINING PLAN

Burlington has ceased all operations at the Site, except as required by the Agreed Order, and, therefore, the information requested in this section of the Application is no longer applicable.

SECTION I

CLOSURE PLAN AND CLOSURE COST ESTIMATES

TABLE OF CONTENTS

LIST OF FIGURES

SECTION I. CLOSURE PLAN AND CLOSURE COST ESTIMATES

40 CFR 264 Subparts G & H
WAC 173-303-806(4)(a)(xiii), 610

Note: The former dangerous waste management facility operated on the Site has been closed; therefore, with the exception of Section I1.0, Section I is not applicable.

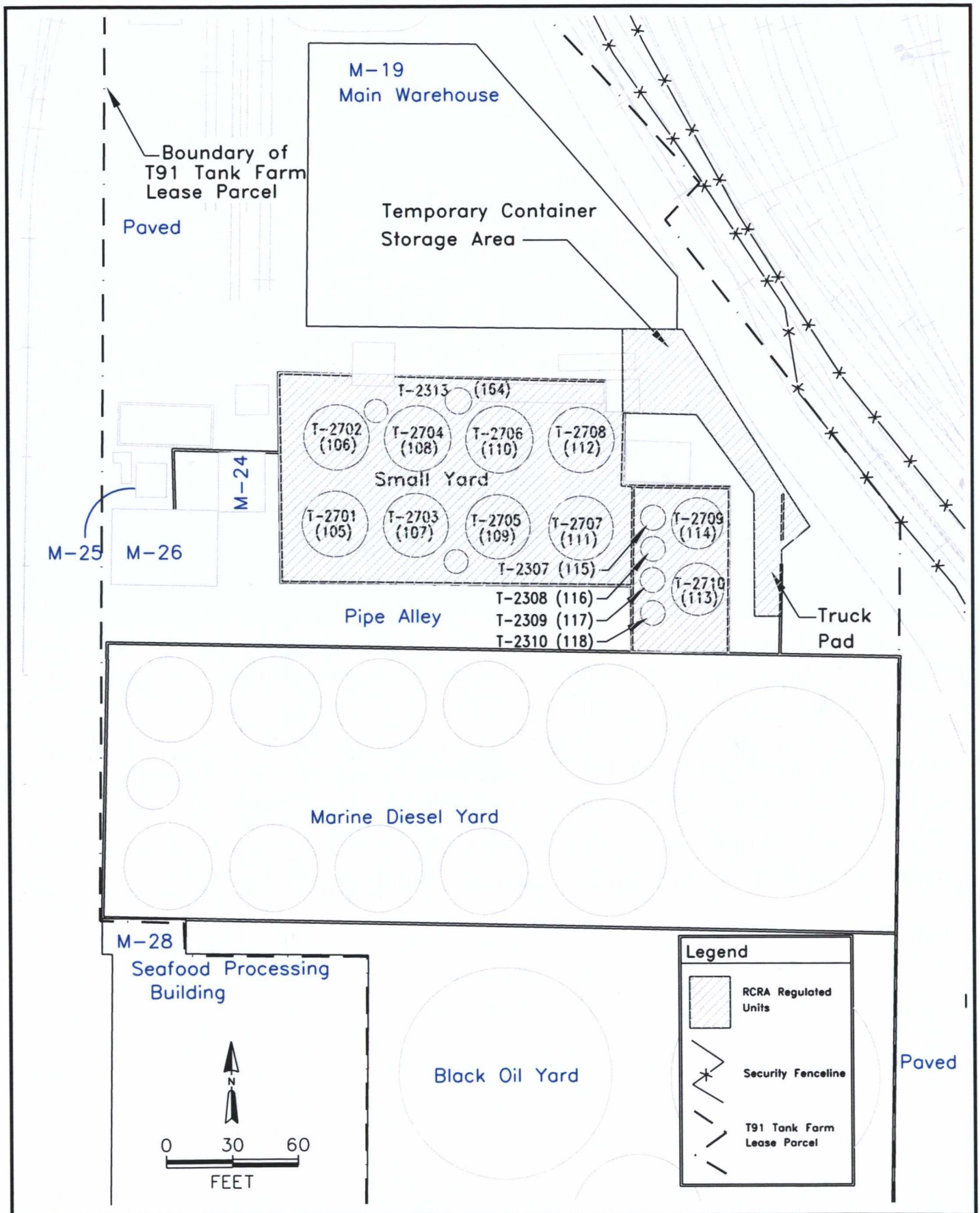
I1.0 SITE CLOSURE

On March 3, 1997, Burlington submitted to Ecology the final documentation certifying above-ground closure of the Final Status (Part B) portions of the Tank Farm Lease Parcel. The required closure activities were completed from February 4 through 13, 1997 in accordance with the August 1996 Closure Plan and Closure Cost Estimates as approved by Ecology on October 29, 1996, following public comment regarding the Plan submitted as Part B Permit Modification Request PRMOD8-2.

Work required under the Closure Plan included verification sampling of the previously decontaminated containment surfaces in the RCRA yard (area of tanks 109-112, 164) and the concrete loading pad, and sand blasting the in-ground oil/water separator to remove 0.6 cm to achieve a "clean debris" surface. Figure I-1 shows the former regulated units at the Tank Farm Lease Parcel.

The March 3, 1997 correspondence included the following documentation:

- Independent registered professional engineer certifications;
- Cleaning certifications for the RCRA Yard and loading pad;
- Summary spread sheet and lab data report of verification analyses; and
- Map indicating verification sample locations.



PSC	TITLE: Former Regulated Units Terminal 91 Tank Farm Lease Parcel	DWN: dtb	DES.:	PROJECT NO.: Permit App.
		CHKD:	APPD:	FIGURE NO.: 1 1-1
		DATE: 10/8/03	REV.:	

SECTION J

OTHER FEDERAL AND STATE LAWS

TABLE OF CONTENTS

SECTION J. OTHER FEDERAL AND STATE LAWS

40 CFR 270.14(b)(20)
WAC 173-303-395(2) & (3)

J1.0 FEDERAL REQUIREMENTS

40 CFR 270.3

Environmental Protection Agency (EPA) regulations require that EPA follow the procedures under certain federal laws before granting or denying a Resource Conservation and Recovery Act (RCRA) permit. The discussion which follows provides a description of how these laws currently apply to existing corrective action conducted at the Site.

J1.1 Wild and Scenic Rivers Act

40 CFR 270.3(a)

The Site does not affect any rivers designated under the Wild and Scenic Rivers Act.

J1.2 National Historic Preservation Act of 1966

40 CFR 270.3(b)

The Site is not listed or eligible for listing on the national or local Registers of Historic Places.

J1.3 Endangered Species Act

40 CFR 270.3(c)
RCW 77.12.020

Threatened or endangered species known to exist on-site or in areas adjacent to the Site include bald eagles, Chinook salmon, and bull trout. On-site corrective action activities are not expected to affect critical habitat areas where endangered species might be present.

J1.4 Coastal Zone Management Act

40 CFR 270.3(d)

The State of Washington Shoreline Management Act (SMA) of 1971, under the jurisdiction of the Washington Department of Ecology (Ecology), is the approved implementation vehicle for the Coastal Zone Management Act. The SMA is implemented at the local level by individual shoreline master programs, which are prepared by local agencies and approved by Ecology.

The Tank Farm Lease Parcel is located in or near a designated shoreline area as defined in the City of Seattle Shoreline Master Program. Smith Cove and Smith Cove Waterway (east slip, center slip, and west slip) are located approximately 800 feet southwest and 600 feet south of the Tank Farm Lease Parcel, respectively (see Figure B1-1, Site Location Map). These surface waters are used for industrial and maritime activities in the Smith Cove area, and provide access to Elliott Bay and Puget Sound.

J1.5 Fish and Wildlife Coordination Act

40 CFR 270.3(e)

The PLPs do not propose to impound, divert, control, or modify any body of water in the vicinity of the Site as part of planned corrective action pursuant to the Agreed Order or applicable requirements. The PLPs do not currently anticipate consultation with state agencies having authority over wildlife resources potentially affected by such corrective action.

J1.6 RCRA Corrective Action Program

40 CFR 264.101; RCRA Hazardous and Solid Waste Amendments (HSWA) 1984 Section 3004(u), 3004(v), 3008(h), and 3013

The Corrective Action Program outlined in the regulations listed above requires corrective action for all releases of hazardous waste or constituents from hazardous waste treatment, storage, or disposal facilities, where necessary to protect human health and the environment.

In 1988, EPA issued an Order to Burlington under RCRA Section 3013 (the "3013 Order") to develop and implement a proposal for monitoring, analysis, and testing at the Site. Actions required by the 3013 Order led to sampling and analysis to determine if any dangerous constituents are present in the soil or groundwater. Pursuant to the 3013 Order, Burlington prepared and submitted a soil and groundwater investigation report for the Tank Farm Lease Parcel, Burlington to EPA on July 5, 1988.

Follow-up investigations were conducted in 1989, 1992 and 1993, and reported to EPA as part of the 3013 Order and the subsequent RCRA Section 3008(h) Order (the "3008(h) Order"). Burlington collected quarterly groundwater samples from all monitoring wells through January 1998 under the requirements of the 3008(h) Order. Evidence of petroleum products and free product was noted in several of the boring logs and monitoring wells.

In 1992, EPA conducted a visual site inspection ("VSI") of the entire Terminal 91 Complex, including the Tank Farm Lease Parcel. Based on that VSI, and on submittals from Burlington and the Port responding to requests for information on solid waste management units, EPA issued a Final RCRA Facility Assessment ("RFA") in November 1994. The RFA listed solid waste management units and areas of concern at the Terminal 91 Complex, including the Tank Farm Lease Parcel.

In March 1998, the Port submitted a Voluntary Cleanup Program ("VCP") application to Ecology for corrective action associated with the Terminal 91 Complex Uplands area exclusive of the Tank Farm Site. A summary of the corrective actions conducted by the Port and/or its tenants to date is presented in Section E of this Application.

In April 1998, the Agreed Order among Ecology, the Port, Burlington and PNO became effective. A summary of the corrective actions conducted to date by the Port, PNO and Burlington with respect to the Site is presented in Section E of this Application.

J2.0 STATE REQUIREMENTS

WAC 173-303-395(2) and (3)

Ecology regulations require that a facility that stores or handles dangerous waste comply with all applicable federal, state, and local environmental protection laws and

regulations. Following closure of the Burlington dangerous waste facility in 1997, no regulated waste streams have been managed by Burlington or the Port at the Tank Farm Lease Parcel. As such, the majority of state and local regulations described below are no longer applicable. A discussion of each regulation is included below.

J2.1 National Emission Standard for Asbestos

Ecology regulations [WAC 173-303-395(3)] require that all waste material containing asbestos be disposed at a facility operated in accordance with 40 CFR Part 61 Subpart M, National Emission Standard for Asbestos. Except to comply with requirements of the Agreed Order, Burlington no longer conducts operations at the Tank Farm Lease Parcel, therefore, this requirement is not applicable.

J2.2 State Water Pollution Control Standards

The Revised Code of Washington (RCW) Chapter 90.48 designates Ecology as the State Water Pollution Control Agency for the purposes of the Federal Clean Water Act to establish and administer state programs for water pollution control. State regulations require a waste disposal permit for industries discharging waste materials into public sewerage systems which discharge into public waters of the state. No industrial or sanitary wastewater is discharged from the Tank Farm Lease Parcel under the Permit; therefore, this regulation is not applicable.

Stormwater and run-off from paved and unpaved areas at the Tank Farm Lease Parcel are managed by the current tenant via an on-site stormwater management system. With this system, stormwater is discharged to the sanitary sewer under the tenant's discharge permit.

J2.3 Minimum Functional Standards for Solid Waste Handling

Regulations contained in Chapter 173-304 WAC establish minimum functional performance standards for solid waste handling, and operation of solid waste handling facilities. The Site was formerly operated as a dangerous waste management facility, and investigations associated with its former use continue to be addressed through an ongoing corrective action process. Any non-dangerous wastes managed as part of the corrective action process would be handled in compliance with this regulation. Permits

under this regulation are not expected to be required for on-site corrective action activities.

J2.4 State Environmental Policy Act

This Application does not propose any new activities that have the potential for creating environmental impacts. It is being submitted only to allow for continuation of ongoing corrective action activities that are required by the Agreed Order and/or the renewed Part B Permit. Dangerous waste operations have not occurred at the facility since 1997, and the applicants do not propose to resume such operations. The Port, Burlington and PNO will continue to conduct corrective action and post-closure activities under the renewed Permit and pursuant to Agreed Order and the applicable provisions of the Model Toxics Control Act. No SEPA review is required at this time because permit renewals that involve ongoing activities are categorically exempt from SEPA pursuant to Ecology's SEPA rules, WAC 197-11-800(14)(i). Pursuant to the SEPA rules that specifically govern cleanups conducted under the Model Toxics Control Act, a SEPA checklist will be submitted later in the process when specific cleanup proposals are developed. WAC 197-11-259.

J2.5 Puget Sound Clean Air Act

The Washington Clean Air Act and the Federal Clean Air Act are implemented by the Puget Sound Clean Air Agency (PSCAA). Currently, no activities proposed under the corrective action procedures of the Part B Permit are subject to PSCAA regulations.

J2.6 Model Toxics Control Act

Relevant portions of the Model Toxics Control Act as codified Chapter 173-340 WAC will be applied to clean-up activities at the Tank Farm Lease Parcel through the corrective action conditions of the Permit.

J3.0 LIST OF PERMITS

With the exception of the necessary RCRA Permit for ongoing corrective action activities, no other permits, including those subject to state and/or local regulatory authority, are held pursuant to the dangerous waste activities formerly conducted at the

Tank Farm Lease Parcel. Additional permits and registrations will be obtained as needed for activities such as construction or on-site remediation activities.

SECTION K

CERTIFICATION

SECTION K. CERTIFICATION

40 CFR 270.11
WAC 173-303-810(13)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Burlington Environmental Inc., a wholly owned subsidiary of Philip Services Corporation

Signature

Jack Wolfin

Name

Vice President - Northwest Region

Title

10-8-03

Date

I certify under penalty of law that the Port owns the real property described in, and is aware of the contents of, this permit application, and that I have received a copy of this application. As owner of the real property, the Port understands that it is responsible for complying with any requirements of chapter 173-303 WAC with which only it is able to comply, and that there are significant penalties for failure to comply with such requirements.

Port of Seattle

_____

Signature

Mic Dinsmore

Name

Chief Executive Officer

Title

_____

Date

Attachment A

Agreed Order No. DE 98HW-N108

by and among the Washington Department of Ecology ("Ecology"), Burlington, the Port and Pacific Northern Oil Corporation ("PNO") and made effective April 10, 1998

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:	)	
	)	
	)	AGREED ORDER
_____	)	
	)	No. DE 98HW-N108
	)	

TO:

Burlington Environmental, Inc. (dba Philip Services Corp.)
Attention: Mr. Charles R. Benke, Jr.
1100 Oaksdale Ave. SW
Renton, Washington 98055

Port of Seattle
Attention: Mr. Mic Dinsmore
P.O. Box 1209
Seattle, Washington 98111

Pacific Northern Oil Corporation
Attention: Mr. George Markwood
100 West Harrison Street
Suite 200 N. Tower
Seattle, Washington 98119

TABLE OF CONTENTS

EXHIBITS

I.

Jurisdiction

This Agreed Order ("Agreed Order") is issued pursuant to the authority of RCW 70.105D.050(1), the Model Toxics Control Act ("MTCA").

II.

Definitions

Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Agreed Order. Additional definitions are as follows:

1. Dangerous Constituent means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 appendix IX, any constituent which causes a waste to be listed or designated as dangerous under the provisions of Chapter 173-303 WAC, and any constituent defined as a hazardous substance at RCW 70.105D.020(7).

2. Dangerous Waste means any solid waste designated under the procedures of WAC 173-303-070 through 173-303-100 as dangerous, extremely hazardous, or mixed waste. Dangerous wastes are hazardous substances under RCW 70.105D.020(7).

3. Dangerous Waste Constituent means any constituent listed in WAC 173-303-9905 and any other constituent that has caused a waste to be a dangerous waste under Chapter 173-303 WAC.

4. Site means the Tank Farm Lease Parcel and areas where releases of dangerous constituents originating from the Tank Farm Lease Parcel operations have come to be located.

5. Tank Farm Lease Parcel consists of three tank yards and associated buildings and covers approximately 4 acres within the Terminal 91 Complex as shown in Exhibit 2.

6. Terminal 91 Complex encompasses approximately 216 acres (this includes both adjacent water areas and upland areas) located at 2001 West Garfield Street, Seattle, Washington. Of the 216 acres, the U.S. Environmental Protection Agency ("EPA") considers 124 of the upland acres a "facility" for purposes of Resource Conservation and Recovery Act ("RCRA") Corrective Action (Final Resource Conservation and Recovery Act Facility Assessment, November 4, 1994). This Agreed Order will only address releases of dangerous constituents at the Site. The remaining upland acreage is currently being addressed as an independent cleanup action.

III.

Findings of Fact

The Washington State Department of Ecology ("Ecology") makes the following Findings of Fact, without admission of such facts by the Port of Seattle, Burlington Environmental Inc. (dba Philip Services Corp.) and Pacific Northern Oil Corporation.

1. The Site is located on the northern side of Elliott Bay at 2001 West Garfield Street, Seattle, Washington. The Site is located within 1/4 mile of Smith Cove and the Smith Cove Waterway on the Elliott Bay waterfront. The Site location is generally depicted in the diagrams attached to this Agreed Order as Exhibit 1 (Port of Seattle Terminal 91 Complex) and Exhibit 2 (Terminal 91 Tank Farm Lease Parcel).

2. The Port of Seattle, herein referred to as the "Port," is the current owner of the entire Terminal 91 Complex which covers approximately 216 acres. The Tank Farm Lease Parcel of the Terminal 91 Complex covers approximately 4 acres.

3. The Tank Farm Lease Parcel was constructed in or about 1926. The Tank Farm Lease Parcel was operated by various oil companies until December 1941 when the United States Navy took possession of the entire Terminal 91 Complex through condemnation. In 1972, the Navy declared Terminal 91 Complex as surplus. The Port began managing Terminal 91 Complex and in 1976 the Port reacquired the Terminal 91 Complex. Terminal 91 Complex remains under the Port management at the present time.

4. Burlington Environmental Inc. was known as Chemical Processors, Inc. ("Chempro") prior to January 1992. Since December 1993, Burlington Environmental Inc. conducted business as Philip Environmental. Since June 1997, Burlington Environmental, Inc. has been doing business as Philip Services Corp. Burlington Environmental Inc. and its predecessors, herein will be referred to as "Philip." Philip operated the Tank Farm Lease Parcel from about June 1971, when it began leasing the Tank Farm Lease Parcel from the Port, through September 1995 when its occupancy ended.

5. Pacific Northern Oil Corporation, herein referred to as "PNO," is currently operating the Tank Farm Lease Parcel under a direct leasing agreement with the Port. PNO stores diesel and other petroleum products at the Tank Farm Lease Parcel.

6. Philip operated the Tank Farm Lease Parcel as a regulated dangerous waste management facility on or after November 19, 1980, the date which subjects facilities to

federal RCRA permitting requirements under 40 CFR 264 and Chapter 173-303 WAC, Washington's Dangerous Waste Regulations.

7. On November 14, 1980, Philip notified EPA of its dangerous waste management activities when Philip filed its original Part A form of the RCRA permit application.

8. Pursuant to the November 14, 1980 notification, Philip was issued identification number WAD000812917 by EPA for this facility.

9. Philip submitted the Part B portion of the RCRA permit application to obtain a final status permit for a dangerous waste treatment, storage and disposal facility on November 8, 1988. There were numerous revisions to the draft Part B application, but the Final Status Facility Permit was issued July 22, 1992 with an effective date of August 22, 1992. Both Philip and the Port are named as permittees, since the Port is owner of the property. Philip ceased active operations at the permitted Tank Farm Lease Parcel in September 1995, and since then has been performing closure activities. Philip operated the Tank Farm Lease Parcel at the time of release of dangerous constituents.

10. Dangerous constituents have been detected in either soil or groundwater at the Site including, but not limited to, dichlorodifluoromethane, vinyl chloride, chloroethane, acetone, carbon disulfide, methylene chloride, 1,1-DCA, cis 1,2-DCE, 2-butanone, chloroform, 1,1,1-TCA, carbon tetrachloride, 1,2-DCA, benzene, TCE, 1,2-dichloropropane, 2-chloroethylvinylether, 4-methyl-2-pentanone, toluene, 1,1,2-trichloroethane, PCE, 2-hexanone, chlorobenzene, ethylbenzene, m-xylene, p-xylene, o-xylene, styrene, bromoform, 1,1,2,2-tetrachloroethane, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene,

naphthalene, total petroleum hydrocarbons ("TPH"), TPH for gasoline, TPH for diesel, light nonaqueous-phase liquid ("LNAPL") of TPH constituents, trichlorofluoromethane, N-nitroso-di-n-propylamine, isophorene, 2,4-dimethylphenol, 4-chloro-3-methyl-phenol, 2-methyl naphthalene, 2-nitroaniline, dimethylphthalate, 2,6-dinitrotoluene, 1,1,2-trichloro-1,2,2 trifluoroethane, bis (2-chloroethoxy)methane, acenaphthene, 2,4-dinitrophenol, dibenzofuran, 4-nitrophenol, fluorene, 4-chlorophenyl phenyl ether, diethylphthalate, N-nitrosodiphenylamine, pentachlorophenol, phenanthrene, anthracene, di-n-butylphthalate, fluoranthene, pyrene, chrysene, bis(2-ethylhexyl)phthalate, di-n-octylphthalate, benzo(k)fluoranthene, benzo(b)fluoranthene, 4-nitroaniline, azobenzene, 4-bromophenyl phenyl ether, benzopyrene, total chromium, total mercury, total selenium, total lead, dissolved lead, and dissolved zinc. The detection of these dangerous constituents is documented in reports, including but not limited to the following:

A. Sweet Edwards/EMCON, December 1987, Property Transfer Assessment, Chemical Processors, Inc., Pier 91 Facility, Seattle, Washington;

B. USEPA\Jacob Engineering Group Inc., April 28 1988, Draft Report, RCRA Facility Assessment, Chemical Processors, Inc., Pier 91, Seattle, Washington.

C. Sweet Edwards/EMCON, May 1988, Phase 1 Hydrogeological Investigation, Chemical Processors, Inc., Pier 91 Facility, Seattle, Washington;

D. Sweet Edwards/EMCON, April 24, 1989, Hydrogeological Investigation, Pier 91 Facility, Seattle, Washington;

E. Burlington Environmental Inc., June 15, 1994, Draft Interim Measures Workplan, Burlington Environmental, Inc., Pier 91 Facility;

F. USEPA/PRC Environmental Management, Inc., November, 4, 1994, Final RCRA Facility Assessment, Port of Seattle/Burlington Environmental Inc. Terminal 91 Facility, Seattle, Washington;

G. Burlington Environmental Inc., February 1995, RCRA Facility Investigation Draft Report, Burlington Environmental Inc., Pier 91 Facility, Seattle, Washington;

H. Bimonthly Progress Reports submitted under the requirements of the EPA 3008(h) Agreed Order for RFI activities.

11. Dangerous constituents have been released into the environment at this Site.

IV.

Ecology Determinations

Ecology makes the following determinations without admission of such by the Port of Seattle, Burlington Environmental, Inc. (dba Philip Services Corp.), and Pacific Northern Oil Corporation:

1. The Port of Seattle is an "owner" as defined at RCW 70.105D.020(11) of a "facility" as defined in RCW 70.105D.020(4).

2. Burlington Environmental, Inc. (dba Philip Services Corp.) is an "operator" as defined at RCW 70.105D.020(11) of a "facility" as defined in RCW 70.105D.020(4).

3. Pacific Northern Oil Corporation is an "operator" as defined at RCW 70.105D.020(11) of a "facility" as defined in RCW 70.105D.020(4).

4. The persons identified in paragraphs 1 through 3 described above are "potentially liable persons," herein referred to as the "PLPs," as defined in RCW 70.105D.020(15).

5. The Site is located at 2001 West Garfield Street, Seattle, Washington.

6. Dangerous wastes and dangerous constituents are considered hazardous substances within the meaning of RCW 70.105D.020(7).

7. Based on the presence of the dangerous constituents at the Site and all factors known to Ecology, there is a release of dangerous constituents, as defined at RCW 70.105D.020(19).

8. By letters dated August 15, 1996, Ecology individually notified the PLPs of their status as "potentially liable persons" under RCW 70.105D.040 after notice and opportunity for comment.

9. Pursuant to RCW 70.105D.030(1) and 70.105D.050, Ecology may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of dangerous constituents, whenever it believes such action to be in the public interest.

10. Based on the foregoing facts, Ecology believes the remedial action required by this Agreed Order is in the public interest.

V.

Work to be Performed

1. Based on the foregoing Facts and Determinations, it is hereby ordered that Philip, PNO, and the Port (herein referred to as the PLPs) perform or ensure the performance

of the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC (MTCA) unless otherwise specifically provided for herein. Each PLP is jointly and severally liable for performing or ensuring the performance of the work and obligations required under this Agreed Order.

2. Within one hundred eighty (180) days of the effective date of this Agreed Order, the PLPs shall provide the Washington State Department of Ecology-Northwest Regional Office ("Ecology-NWRO") a draft remedial investigation/data evaluation report. The primary purpose of the remedial investigation/data evaluation report is to provide a comprehensive report of investigative work completed to date in order to assist in preparation of the feasibility study and selection of potential cleanup actions. The remedial investigation/data evaluation report also will identify potential data gaps. The remedial investigation/data evaluation report shall provide an evaluation of the horizontal and vertical distribution of chemicals at the Site, their potential sources, and potential transport mechanisms. The remedial investigation/data evaluation report is to include all existing soil, storm drain sediment, and groundwater data collected through July 1997.

A. The groundwater presentation in the draft remedial investigation/data evaluation report shall at a minimum:

i) tabulate all groundwater data collected from groundwater monitoring wells at the Site showing specific groundwater monitoring well, sample collection date, and constituent concentration;

ii) provide a summary table of well completion details for all groundwater monitoring wells installed at the Site. The well completion summary

table shall include at a minimum, groundwater well identification, installation date, surface elevation, elevation of measure point, total depth, screen interval, and the geologic unit(s) in which the screen interval is located. All survey information will be provided to a common datum;

iii) provide a summary table of all groundwater elevation data collected from groundwater monitoring wells at the Site. All groundwater elevation data shall be to a common datum. The table will include groundwater well identification, elevation of measuring point, depth to groundwater, elevation of the groundwater surface corrected for LNAPL accumulations (if applicable), and provide an indication of whether the well is screened in the shallow or deep aquifer;

iv) include groundwater data (for representative indicator chemical constituents) presented as concentration vs time graphs for representative groundwater monitoring wells which shows, at a minimum, analytical detection limits, the chemical constituent concentrations, sample collection dates, and reference marks indicating when dedicated sampling systems were installed.

v) construct quarterly isopleth maps for representative indicator chemical constituents using the last eight quarters of data ending with the July 1997 sampling event;

vi) construct quarterly isopach maps for the LNAPL for the last five years of data ending with the July 1997 sampling event, using thickness correction factors calculated from historic Site baildown tests to correct for apparent LNAPL thickness observed in wells;

vii) construct hydrographs for representative groundwater monitoring wells showing date of measurement and groundwater elevation referenced to a common datum;

viii) graph monthly precipitation data from precipitation data for the Site or from the closest rain gauge monitoring station to the Site;

ix) construct groundwater flow maps using the last eight quarters of data ending with the July 1997 sampling event, using data collected from the shallow aquifer beneath the Site;

x) provide hydraulic conductivity evaluations including estimated aquifer hydraulic parameters, and the directions and rates of groundwater flow (including the methods used for the analysis);

xi) provide an analysis of the results of tidal monitoring studies performed on groundwater monitoring wells screened in the deep aquifer beneath the Site along with the methods used for performing these analyses; and

xii) provide estimations of the directions and rates of contaminant transport and the methods used for assessing these parameters.

B. The soils presentation in the draft remedial investigation/data evaluation report shall at a minimum:

i) tabulate all soils and storm drain data showing, at a minimum: boring identification or storm drain location, sample collection date, sampling depth, analytical detection limits, and constituent concentrations;

ii) construct isopleth maps for representative indicator chemical constituents at various depths; and

iii) provide geologic logs for all wells and borings installed at the Site.

C. The draft remedial investigation/data evaluation report shall analyze all existing groundwater, soil and storm drain sediment data.

i) Groundwater analysis shall include, at a minimum, the seasonal effects on groundwater data, the sources of plumes, the comparison of water quality information before and after the installation of dedicated sampling systems, effects of detection limits on the analyses, impacts of Interim Measures on the LNAPL plume(s) and thickness of layer, constituents at the Site, and estimates of the rate of transport (include method or model for determination).

ii) Soils and storm drain sediment analysis shall include the effect of the detection limits on the analysis.

D. The remedial investigation/data evaluation report shall include a minimum of four (4) cross-sections using a common survey datum. Each cross-section shall include, at a minimum, subsurface stratigraphy and hydrostratigraphy, total depth of well or boring, screen interval, groundwater elevation, and soil classification using the Unified Soils Classification system ("USCS").

E. The remedial investigation/data evaluation report shall include a Site plan map with boring and groundwater monitoring well locations.

F. The remedial investigation/data evaluation report shall include any revisions to the present conceptual model and will identify potential data gaps.

G. The remedial investigation/data evaluation report will include a copy of the existing sampling and analysis plan as amended, provide an assessment of current quarterly monitoring requirements as set forth in Section V.4 and recommendations for modifications, if indicated.

3. Submit a final remedial investigation/data evaluation report sixty (60) days after receiving comments from Ecology on the draft report.

4. If data gaps exist, then either Ecology or the PLPs may propose Additional Work to fill the data gaps under provision Section VII.6 of this Agreed Order.

5. The PLPs shall continue the quarterly monitoring program currently being performed by Philip. This quarterly monitoring program was approved by the EPA in a letter to Philip dated December 15, 1995, and was described in a letter to Philip from Ecology dated December 13, 1995. Ecology's letter was provided as an attachment to EPA's letter.

6. Within sixty (60) days after receiving written Ecology approval of the final remedial investigation/data evaluation and any data gap report(s), the PLPs shall submit to Ecology NWRO a draft Feasibility Study (FS) workplan. The draft FS workplan shall be written in accordance with WAC 173-340-350 and contain, at a minimum, methods for evaluating the technical, environmental, human health and financial costs associated with each

remedial option. The FS workplan shall contain a time schedule for completing the FS activities.

7. Within forty-five (45) days after receiving Ecology comments on the draft FS workplan, the PLPs shall revise the draft FS workplan and submit a final FS workplan to Ecology NWRO for final written approval. After receiving final written approval from Ecology, the PLPs shall immediately begin implementation of the final Ecology approved FS workplan.

8. Upon completion of the work described in the final Ecology-approved FS workplan, the PLPs shall submit to Ecology-NWRO a draft FS report as provided in the approved FS workplan schedule.

9. After Ecology review and approval of the final FS report, and if required by Ecology, the PLPs shall submit a draft cleanup action plan ("DCAP") to Ecology-NWRO within ninety (90) days of receipt of formal notification of such requirement by letter. The notification shall identify the cleanup alternative preliminarily chosen by Ecology. The DCAP shall meet the requirements of WAC 173-340-360, -400(1) through (7), -410, as well as WAC 173-303-646.

10. The performance of any work described in any DCAP required by Ecology shall be the subject of an amendment to the Agreed Order or a new Agreed Order or Consent Decree.

11. The PLPs shall follow the reporting guidelines in WAC 173-340-840 for all parts of this Agreed Order unless otherwise agreed to by both Ecology and the PLPs. All data generated pursuant to this Agreed Order shall be submitted to Ecology-NWRO, including all

outlier and duplicate data. In addition, all groundwater, sediment, surface water, and soil data generated pursuant to this Agreed Order shall be submitted to Ecology-NWRO as copies of the original reported laboratory data sheets, in tabulated data format and in an electronic format approved by Ecology for all referenced environmental media. Laboratory detection limits and practical quantitation limits shall be reported for each constituent concentration detected.

12. The PLPs shall submit status reports to Ecology-NWRO quarterly, starting from the effective date of this Agreed Order and continuing until all of the requirements of this Agreed Order are completed to Ecology's satisfaction. The submittal shall be due on the 20th day of the month following the three-month activity period. The PLPs shall include the following in each status report:

A. all work conducted pursuant to this Agreed Order during the last three month period;

B. occurrence of any problems, how problems were rectified, deviations from the workplans and an explanation of all deviations;

C. projected work to occur in the upcoming three months;

D. summaries of significant findings, changes in personnel, summaries of significant contacts with all federal, state, local community, and public interest groups;

E. all laboratory analyses (as copies of the original laboratory reporting data sheets, in tabulated data format) for which quality assurance procedures are completed during the three month period;

F. all field measurements;

G. tabulations of that quarterly groundwater data showing specific groundwater monitoring well, sample collection date, and constituent concentration;

H. groundwater contour maps for the shallow aquifer for that quarterly sampling event; and

I. an isopach map for the LNAPL for that quarterly sampling event, using results of Site baildown tests to correct for apparent LNAPL thickness observed in wells.

13. Annually, the PLPs shall submit a groundwater data analysis report to Ecology-NWRO. The first annual report will be due to Ecology 14 months after the effective date of this Agreed Order. The annual groundwater data analysis report shall at a minimum:

A. present analytical data for groundwater monitoring wells using tables (for all data and summary) and graphs (for representative groundwater monitoring wells and chemical constituents);

B. construct hydrographs for representative groundwater monitoring well showing date of measurement and groundwater elevation;

C. graph monthly precipitation data from the Site or from the closest rain gauge monitoring station to the Site; and

D. evaluate the seasonal effects on the groundwater data, contaminant plume characteristics, impacts of Interim Measures on the LNAPL, constituents that are migrating from the Site, an estimate of the rate of transport, and any revisions to the conceptual model.

14. . By February 15 of each year, the PLPs shall submit to Ecology-NWRO the number of pounds of contaminant stabilized, treated, or removed, the volume of contaminated media remediated or contained and the area of land returned to appropriate use (in acres) from the implementation of Interim Measures in a format approved by Ecology.

15. If both Ecology and the PLPs agree that such a change is necessary, the frequency of progress report submittals may be revised. This is an example of a minor modification that requires the signature of both Ecology and the PLPs but no public comment.

16. The PLPs shall notify Ecology's project manager in writing of newly-discovered releases of hazardous substances as defined in Chapter 173-340 WAC at the Site no later than fifteen (15) days after discovery. Additional activities to address new discoveries are subject to the Additional Work provisions of Section VII.6.

VI.

Incorporation of Exhibits

Exhibits 1, 2, and 3 are hereby incorporated into this Agreed Order by reference and are integral and enforceable parts of this Agreed Order.

VII.

Terms and Conditions of Agreed Order

1. Public Notices. WAC 173-340-600(10)(c) requires a thirty (30) day public comment period before this Agreed Order becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Agreed Order should public comment disclose facts or considerations which indicate to Ecology that the Agreed Order is inadequate or improper in any respect.

2. Remedial Action Costs. The PLPs shall pay to Ecology costs incurred by Ecology pursuant to this Agreed Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, and Agreed Order preparation, oversight and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). The PLPs shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve (12) percent per annum.

3. Designated Project Managers. The project manager for Ecology is:

Name:	Sally Safioles
Address:	Department of Ecology-NWRO
	160th Avenue S.E.
	Bellevue, Washington 98008-5452
Phone:	Sally Safioles: (425) 649-7026
FAX:	(425) 649-7098

The project manager for the PLPs is:

Name:	Susan Roth
Address:	Roth Consulting
	6236 27th Ave. N.E.
	Seattle, Washington 98115-7114
Phone:	(206) 526-8494
FAX:	(206) 522-2546

The project managers shall be responsible for overseeing the implementation of this Agreed Order. To the maximum extent possible, communications between Ecology and the PLPs, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Agreed Order, shall be directed through the project managers. Should Ecology or the PLPs change project managers, written notification shall be provided to Ecology or the PLPs at least ten (10) days prior to the change.

4. Submittals. Once approved in writing by Ecology, all submittals to Ecology are incorporated by reference and become enforceable parts of this Agreed Order, as if fully set forth herein.

During the performance of work under an approved submittal, field modifications to the submittal may be agreed to verbally by the Project Managers. In such case, the PLPs shall submit a description of the modification to Ecology's Project Manager in writing within seven

(7) days after the verbal agreement, and Ecology's Project Manager shall provide written confirmation of the agreed modification.

If following submission of a draft submittal, the PLPs disagree with or have questions concerning Ecology's comments and/or required modifications, the PLPs, within five (5) days after receipt of Ecology's comments and/or required modifications, may in writing request a meeting or telephone conference with Ecology's Project Manager to resolve the matter. Ecology's receipt of such written request will begin a twenty (20) day informal dispute resolution period. The written request shall include a statement of the issue(s) the PLPs wish to address.

The twenty (20) day informal resolution period shall extend the due date for resubmittal. If agreement is reached within the informal resolution period, the PLPs shall incorporate into a revised submittal the agreed-upon comments and/or modifications within thirty (30) days after reaching agreement, unless a longer time is specified by Ecology. If agreement is not reached within the informal resolution period, Ecology shall send a written letter of disapproval to the PLPs. Within thirty (30) days of receipt of the written disapproval letter, the PLPs shall submit a revised, final draft submittal which incorporates all Ecology's comments or required modifications. In lieu of, or after this informal dispute resolution process, the PLPs may also invoke the dispute resolution procedures in Section VII.10 of this Agreed Order for all comments and/or required modifications the PLPs wish to challenge.

5. Performance. All work performed pursuant to this Agreed Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in dangerous waste site

investigation and cleanup. The PLPs shall notify Ecology as to the identity of such engineer(s), hydrogeologist(s) or similar expert(s), and of any contractors and subcontractors to be used in carrying out the terms of this Agreed Order, in advance of their involvement at the Site. The PLPs shall provide a copy of this Agreed Order to all agents, contractors and subcontractors retained to perform work required by this Agreed Order and shall ensure that all work undertaken by such agents, contractors and subcontractors will be in compliance with this Agreed Order.

Except where necessary to abate an emergency situation, the PLPs shall not perform any remedial actions at the Site other than those required by this Agreed Order unless Ecology concurs, in writing, with such additional remedial actions.

6. Additional Work. Ecology may determine or the PLPs may propose that Additional Work is or may be necessary to implement this Agreed Order. If the Additional Work is proposed by the PLPs, Ecology will respond to the proposal in writing within an appropriate time period, no longer than thirty (30) days. If the Additional Work is required by Ecology, then Ecology will specify in writing the basis for its determination that the Additional Work is necessary. Within fifteen (15) days after the receipt of such written determination, the PLPs shall notify Ecology of their willingness to perform the Additional Work or may request a meeting with Ecology to discuss the Additional Work. If the PLPs are willing to perform the Additional Work, the PLPs shall submit a Workplan for Ecology review incorporating the Additional Work within thirty (30) days (or more, if approved by Ecology) after either submitting notice of their willingness to perform or the date of the meeting with Ecology, as applicable. The Workplan shall be subject to the procedures set forth in Section VII.4. Upon

written approval of the Workplan, the PLPs shall implement the Workplan in accordance with the schedule contained therein.

7. Access. Ecology or any Ecology authorized representative shall have the authority to enter and freely move about the Site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Agreed Order; reviewing the progress in carrying out the terms of this Agreed Order; conducting such tests or collecting samples as Ecology or the project manger may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Agreed Order; and verifying the data submitted to Ecology by the PLPs. By signing this Agreed Order, the PLPs agree that this Agreed Order constitutes reasonable notice of access, and agree to allow access to the Site at all reasonable times for purposes of overseeing work performed under this Agreed Order. Ecology shall allow split or replicate samples to be taken by the PLPs during an inspection unless doing so interferes with Ecology's sampling. The PLPs shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) days notice before any sampling activity.

8. Public Participation. The PLPs shall prepare and/or update a public participation plan for the Site, Exhibit *3* to this Agreed Order. Ecology shall maintain the responsibility for public participation at the Site. The PLPs shall help coordinate and implement public participation for the Site.

9. Retention of Records. The PLPs shall preserve in a readily retrievable fashion, during the pendency of this Agreed Order and for ten (10) years from the date of completion of

the work performed pursuant to this Agreed Order, all records, reports, documents, and underlying data in its possession relevant to this Agreed Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of the PLPs, then the PLPs agree to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

10. Dispute Resolution. The PLPs may request Ecology to resolve disputes which may arise during the implementation of this Agreed Order. Such request shall be in writing and directed to the signatory, or his/her successor(s), to this Agreed Order. Ecology resolution of the dispute shall be binding and final. The PLPs are not relieved of any requirement of this Agreed Order during the pendency of the dispute and remain responsible for timely compliance with the terms of the Agreed Order unless otherwise provided by Ecology in writing.

11. Reservation of Rights/No Settlement. This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Agreed Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against the PLPs to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against the PLPs to require those remedial actions required by this Agreed Order, provided the PLPs comply with this Agreed Order.
Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of dangerous constituents from the Site.

In the event Ecology determines that conditions at the Site are creating or have the potential to create a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order the PLPs to stop further implementation of this Agreed Order for such period of time as needed to abate the danger.

12. Transference of Property. Prior to any voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site, the PLPs shall provide for continued implementation of all requirements of this Agreed Order and implementation of any remedial actions found to be necessary as a result of this Agreed Order.

Prior to transfer of any legal or equitable interest the PLPs may have in the Site or any portions thereof, the PLPs shall serve a copy of this Agreed Order upon any prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, the PLPs shall notify Ecology of the contemplated transfer.

13. Compliance with Other Applicable Laws.

A. All actions carried out by the PLPs pursuant to this Agreed Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in paragraph B of this section.

B. Pursuant to RCW 70.105D.090(l), the substantive requirements of Chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals for the remedial action under this Agreed Order that are known to be applicable at the time of issuance of the Agreed Order are to be included in this Agreed Order. Ecology was not aware of any such substantive requirements at the time of issuance of this Agreed Order.

The PLPs have a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(l) would otherwise be required for the remedial action under this Agreed Order. In the event the PLPs determine that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Agreed Order, they shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or the PLPs shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the PLPs shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the PLPs and on how the PLPs must meet those requirements. Ecology shall inform the PLPs in writing of these requirements. Once established by Ecology, the additional requirements shall

be enforceable requirements of this Agreed Order. The PLPs shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies prior to establishing the substantive requirements under this section.

C. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(l) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply and the PLPs shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(l), including any requirements to obtain permits.

VIII.

Satisfaction of this Agreed Order

The provisions of this Agreed Order shall be deemed satisfied upon the PLPs' receipt of written notification from Ecology that the PLPs have completed the remedial activity required by this Agreed Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with.

IX.

Enforcement

1. Pursuant to RCW 70.105D.050, this Agreed Order may be enforced as follows:

A. The Attorney General may bring an action to enforce this Agreed Order in a state or federal court.

B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

C. In the event the PLPs refuse, without sufficient cause, to comply with any term of this Agreed Order, the PLPs will be liable for:

i) up to three times the amount of any costs incurred by the state of Washington as a result of the PLPs' refusal to comply; and

ii) civil penalties of up to $25,000 per day for each day the PLPs refuse to comply.

D. This Agreed Order is not appealable to the Washington Pollution Control Hearings Board. This Agreed Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Agreed Order: _____

PORT OF SEATTLE

By _____

Mic Dinsmore

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

By _____

Julie Sellick
Section Supervisor
Hazardous Waste and Toxics Reduction
Northwest Regional Office

BURLINGTON ENVIRONMENTAL, INC. (dba PHILIP SERVICES CORP.)

By _____

Charles R. Benke, Jr.

PACIFIC NORTHERN OIL CORPORATION

By _____

George Markwood
Its Vice President

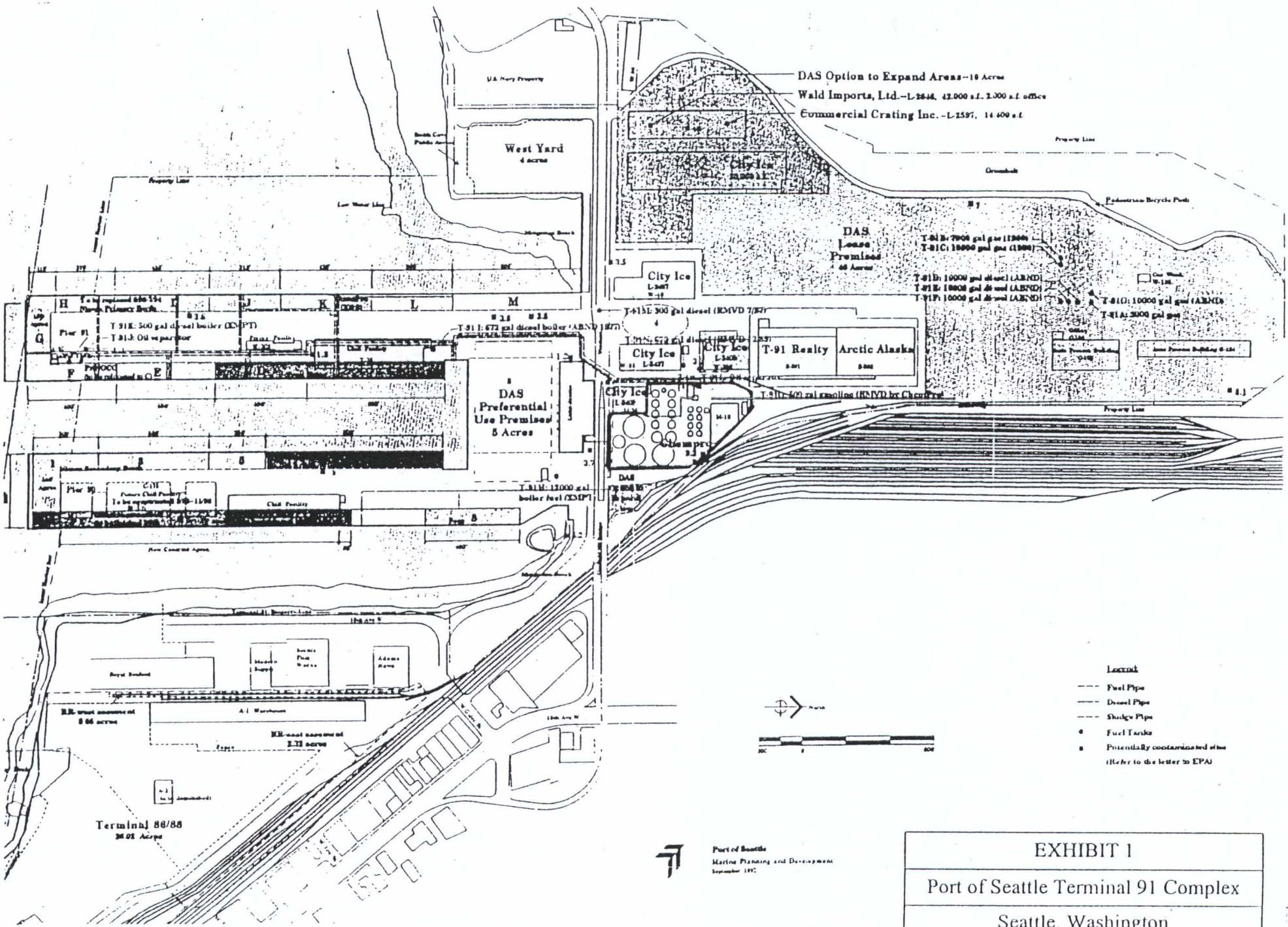
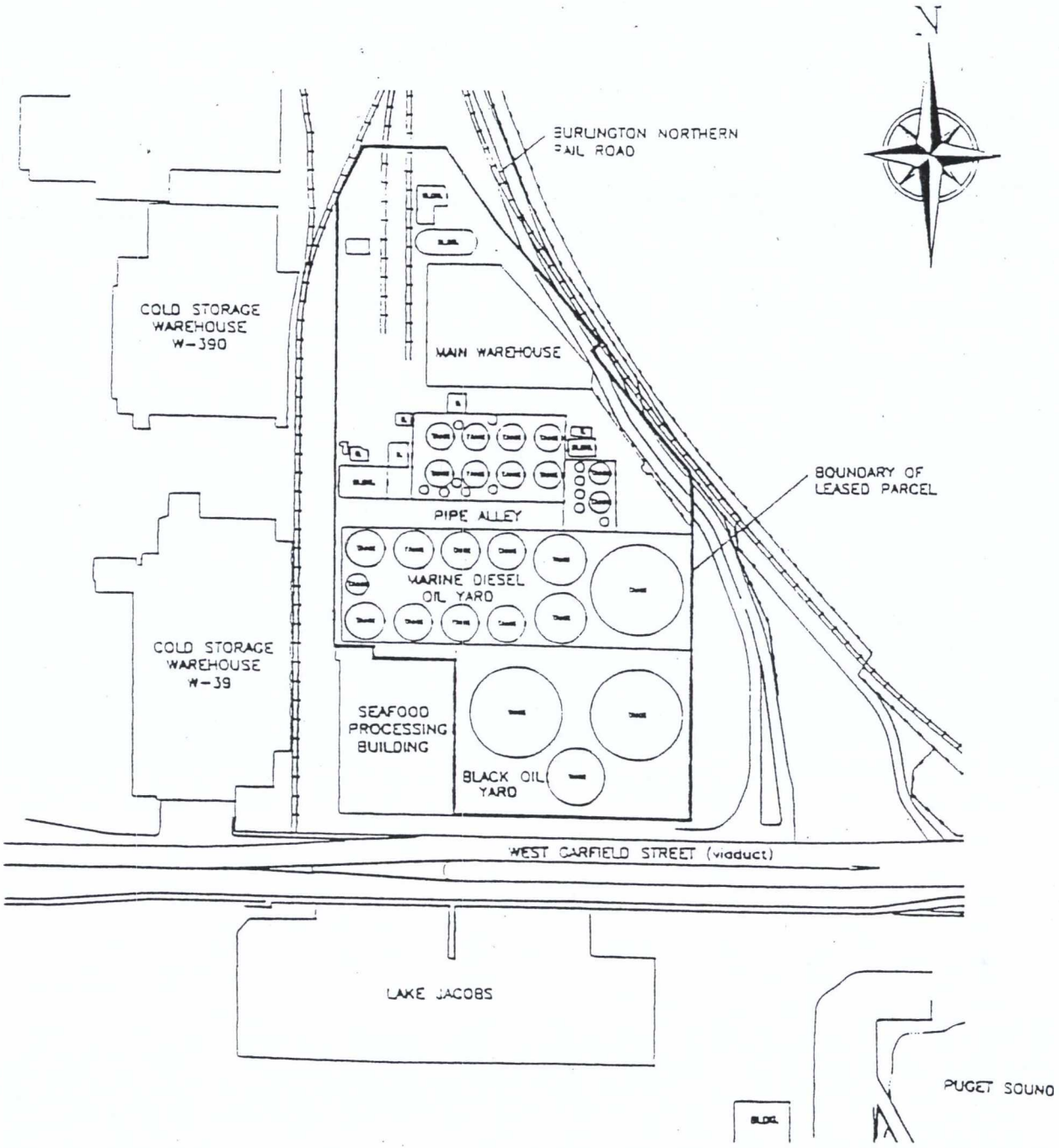


EXHIBIT 1
Port of Seattle Terminal 91 Complex
Seattle, Washington



150 0 150

SCALE 1" = 150'

EXHIBIT 2
Port of Seattle Terminal 91
Tank Farm Lease Parcel

All locations shown are approximate.

Exhibit 3

Terminal 91 Tank Farm Site
Remedial Investigation and Feasibility Study
and Permit Modification

Public Participation Plan

Prepared By:

The Washington Department of Ecology
Philip Services Corp.
The Port of Seattle
Pacific Northern Oil Corporation

January 1998

TABLE OF CONTENTS

1.0 Introduction

Overview

Burlington Environmental, Inc. dba Philip Services Corp. (Philip), the Port of Seattle (the Port), and Pacific Northern Oil Corporation (PNO) have been identified as potentially liable persons (PLPs) for the Terminal 91 Tank Farm Site (tank farm site) in Seattle. The Washington State Department of Ecology (Ecology) and the PLPs are proposing to enter into a voluntary Agreed Order under the Model Toxics Control Act (MTCA), Washington's hazardous waste cleanup law. The Agreed Order would be a formal legal agreement which, in this case, would call for the PLPs to prepare a remedial investigation (RI) and data evaluation report and perform a feasibility study (FS) at the tank farm site.

The tank farm site is located at the north end of Elliott Bay at 2001 West Garfield Street within the Terminal 91 Complex in Seattle, Washington. The tank farm was constructed in 1926 as part of a petroleum refinery. The tank farm was owned and/or operated by various oil companies through 1941. In 1942, the U.S. Navy acquired the entire Terminal 91 property from the Port and other parties through condemnation. The U.S. Navy owned and operated the tank farm until 1971. In June 1971, Philip (formerly known as Chemical Processors, Inc. or Chempro) began leasing and operating the tank farm as an oil and wastewater processing facility. From 1974 to 1981, oil owned by PNO was stored at the tank farm under a throughput agreement with Philip. In 1976, the Port reacquired the entire Terminal 91 property from the U.S. Navy and continued to lease the tank farm to Philip.

Philip operated the tank farm as a dangerous waste management facility on or after November 19, 1980, the date that subjected facilities to federal RCRA permitting requirements under 40 Code of Federal Regulations (CFR) 264 and state requirements under Washington Administrative Code (WAC) Chapter 173-303, the Dangerous Waste Regulations. In 1981, Philip subleased a portion of the tank farm to PNO for storage and

blending of diesel and other fuel oils. Philip ceased operations at the tank farm in September 1995. Since that time, Philip has been performing closure activities that include decontamination of tanks and concrete surfaces, and collection of samples to verify that the surfaces have been decontaminated. PNO now operates the tank farm under a lease directly from the Port.

Historically, hazardous substances including petroleum products were released to soil and groundwater at the tank farm site. These substances were released primarily from aboveground storage tanks, fuel distribution piping systems, and other activities associated with historical operations at the site. These activities have included storage of petroleum products and treatment and storage of dangerous waste. Soil and groundwater investigations performed over the past ten years have been documented in reports that have been submitted to Ecology and the U.S. Environmental Protection Agency (EPA).

The petroleum products and dangerous constituents released at the tank farm are considered hazardous substances under MTCA. Extensive environmental investigations, and other cleanup activities including closure, have already been performed at the site under EPA and Ecology oversight over the past ten years as part of the ongoing RCRA process. In addition, quarterly groundwater monitoring currently is being performed. The proposed MTCA Agreed Order would transfer the site cleanup from EPA oversight to Ecology oversight to fulfill RCRA corrective action using the the MTCA process. The remedial investigation/data evaluation report to be prepared under the proposed Agreed Order would evaluate where chemicals of concern have been detected in soil and groundwater at the tank farm site, the potential sources of these chemicals, and their potential transport mechanisms. This report would primarily evaluate existing data generated during investigations performed at the site over the past ten years and identify potential data gaps. The findings discussed in the remedial investigation/ data evaluation report would be used to assist in preparation of a feasibility study and selection of potential cleanup actions at the tank farm site.

Public Participation Commitments for the Model Toxics Control Act and Resource Conservation and Recovery Act

MTCA emphasizes public participation throughout the cleanup process. Neighboring residents, businesses and other interested parties are given the opportunity to provide input regarding cleanup decisions. MTCA regulations require "the early planning and development of a site-specific public participation plan." The plan must include public notices and solicitation of public comments, and may also include announcement of the availability of reports and studies for the site.

WAC Section 173-340-600 sets forth provisions for public participation under MTCA. In addition, WAC 173-340-530 (6) includes a provision for appropriate public participation opportunities when an Agreed Order is in place for a designated hazardous waste site. WAC 173-303-830 and -840 provides requirements for public participation activities when a dangerous waste permit modification is proposed.

This plan describes public participation activities for the proposed voluntary Agreed Order for a remedial investigation/data evaluation report and a feasibility study, and permit modification at the Terminal 91 Tank Farm Site.

Participants in this Plan

Philip, the Port, and PNO have been identified by Ecology as PLPs for the tank farm site. The PLPs and Ecology are proposing to enter into a voluntary legal agreement called an Agreed Order, which outlines the work required of the PLPs and describes how Ecology and the PLPs will work together. Ecology's role is to oversee the PLPs' work to ensure that the requirements of the Agreed Order and MTCA are met and to ensure that the public participation activities detailed in this plan are carried out. The PLPs' role is to carry out the tasks specified in the Agreed Order and to assist as needed in public

participation activities. Under RCRA, there is an additional requirement to modify the existing dangerous waste permit. This permit only applies to the Port and Philip.

Goal of this Public Participation Plan

MTCA states that public participation plans are intended to encourage a coordinated and effective public involvement tailored to the public's needs at a particular facility. The goals of this plan are:

- To identify people and organizations with an interest or potential interest in the tank farm site RI/FS processes and findings.

- To identify community concerns related to the RI/FS and ways to address those concerns.

- To promote public understanding of the proposed voluntary Agreed Order and RI/FS process and findings.

- To aid communication and to encourage interaction and collaboration among Ecology, the PLPs, and the community.

- To meet the public participation requirements under MTCA and the Dangerous Waste Regulations [WAC 173-340-530 (6), WAC 173-340-600, WAC 173-303-830 and WAC 173-303-840].

2.0 The Public Participation Process at the Tank Farm Site

MTCA calls for public participation at important milestones in the investigation and cleanup process. The public must be provided an opportunity to comment before Ecology can give final approval for most key site decisions.

This Public Participation Plan describes the activities planned for the scope of work described in the proposed Agreed Order. Public participation activities for any additional phases will be identified later through an amendment to this plan or through the development of a new plan.

Roles and Responsibilities

In accordance with MTCA requirements, Ecology retains overall responsibility and approval authority for public participation activities for this project. Ecology, with assistance from the PLPs, will conduct activities related to formal public notice and comment periods, including soliciting, receiving and considering comments, making final decisions, and preparing summaries of the public's comments and Ecology's responses to those comments.

Points of Contact

The following people will be the primary points of contact for the general public and media and for coordinating project-related public participation activities:

Ecology:

Sally Safioles
Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008-5452
(206) 649-7026

PLPs:

Rosie Courtney
Port of Seattle
P.O. Box 1209
Seattle, WA 98111
(206) 728-3414

Required Activities

The required public participation activities for this project are as follows. Ecology is the lead for these activities; the PLPs will assist as needed:

1. A **45-day public comment period** will be scheduled for the proposed voluntary Agreed Order and permit modification from **November 5 through December 19, 1997**.

2. Formal **public notice** for the comment period will include the following:

a. A mailed **fact sheet** summarizing the Agreed Order and related activities and inviting the public to comment. This fact sheet will be mailed to individuals on a mailing list developed jointly by Ecology and the PLPs (see description below).

b. **Legal Notices** announcing the comment period will be placed in the Seattle Times and the Queen Anne/Magnolia News.

c. A **notice** will be published in Ecology's Site Register.

d. A **public hearing** will be scheduled to discuss the proposed action if significant public interest is expressed. Written notice of opposition and written requests for a public hearing must be submitted prior to the end of the public comment period. Any request for a hearing must be accompanied by a basis for such a request and a discussion of topics to be raised in a public hearing.

e. a **local radio broadcast** of the public notice

Supporting tasks related to the above required activities include:

Mailing List. Ecology and the PLPs will work together to compile a comprehensive mailing list for the project, and Ecology will maintain and update the mailing list. The list will include at a minimum, individuals, groups, public agencies, elected officials and private firms with a known interest in the site, appropriate media, as well as anyone who requests to receive site-related mailings. The list will be maintained by Ecology with a current copy provided to the PLPs as requested. This list will be updated as needed by Ecology.

Public Hearings or Meetings. If public hearings or meeting are held, Ecology will schedule an appropriate time and secure a meeting place. Ecology will provide public notice of the hearing or meeting and provide a record or transcript of the formal comments made at the hearing or meeting. Ecology will provide the record or transcripts to the PLPs. If necessary, the PLPs will cooperate with Ecology and assist by providing descriptive materials and personnel as needed for required public hearings or meetings.

When such assistance is needed. Ecology will give the PLPs advance notice in order to schedule and prepare for the meeting.

Information Repositories. Information repositories will be established for the public to access documents pertaining to site activities. Information placed at the repositories will include all site related documents requiring a comment period (the Agreed Order. for example). The following are the repositories for the tank farm site:

Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452
Attention: Sally Perkins
(425) 649-7190

Seattle Public Library--Downtown (Central)
(4th and Madison)
1000 4th Avenue
Seattle, WA 98104-1193
(206) 386-4636

Seattle Public Library--Queen Anne
400 W. Garfield St.
Seattle, WA 98119
(206) 386-4227

Seattle Public Library--Magnolia
2801 34th Ave. W
Seattle, WA 98199
(206) 386-4225

The complete permit and other historical site files are available for review at Ecology's Northwest Regional Office by appointment at the above number. For special accommodations or language translation assistance call Sally Safioles at (425) 649-7026 or (425) 649-4259 (TDD). Ecology is an affirmative action and equal opportunity employer.

Responsiveness Summaries. Comments received during the public comment periods will be retained in the site files at Ecology with copies provided to the PLPs. Responses to comments received during the public comment periods will be compiled in a responsiveness summary prepared by Ecology. A draft responsiveness summary will be provided to the PLPs for review and comment. Ecology may modify the responsiveness summary based on the PLPs' comments. The final responsiveness summary will be sent to those who submitted written and/or oral comments and to the information repository. Notice of the availability of the summary will be printed in Ecology's Site Register.

Updates to the Public Participation Plan

This plan will be updated at each phase of cleanup activity for this site. The next scheduled update will occur when and if cleanup actions are chosen for this site.

3.0 Community Concerns

To date, there has been little expression of public interest or concern about the tank farm site. The drafting and activation of this public participation plan may lead to an increase in such interest, and the plan is being drafted to anticipate and answer the needs of the public for information, and to ensure that the public has the opportunity to participate in the cleanup process to be undertaken at the tank farm site in accordance with the requirements of MTCA and the Dangerous Waste Regulations.

Attachment B

VCP Application and Cover Letter

Port of Seattle

March 10, 1999

Sally Safioles
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Subject: Submittal of VCP Application and Clarification of 2/9/99 Meeting Minutes
Terminal 91 Upland Independent Cleanup

Dear Ms. Safioles:

This letter is being provided to you in order to submit the Port of Seattle's application for the Voluntary Cleanup Program (VCP) for independent cleanup work to be performed at the Terminal 91 Upland site. Such independent work will be done to satisfy corrective action requirements under Ch. 173-303 WAC and the facility's dangerous waste permit. The letter also clarifies some of the points that were made at our meeting on February 9, 1999 at your offices. In attendance at that meeting were:

- Doug Hotchkiss, Port of Seattle
- Susan Roth, technical consultant for Port of Seattle
- Sally Safioles, Washington Department of Ecology (Ecology)
- Galen Tritt, Washington Department of Ecology
- Hideo Fujita, Washington Department of Ecology

Ecology provided the Port with a draft summary of the minutes of that meeting. This letter adds information regarding the discussions, and states the Port's understanding of some of the issues that were discussed.

Discussions Regarding the Scope of Work

The Port understands that Ecology has agreed that cleanup actions focusing on the groundwater-to-surface-water pathway to potential receptors represent the most likely cleanup approach for the site. Based on that cleanup approach, the Port was uncertain as to the rationale for Ecology's requesting additional work that would not provide significant additional information toward achieving a site cleanup. Ecology's requests (at the February 9 meeting) for additional site characterization, especially in regard to additional delineation of soil contamination, did not appear to be warranted.

P.O. Box 1209
Seattle, WA 98111 U.S.A.
(206) 728-3000
TELEX 703433
FAX (206) 728-3252

For example, Ecology requested at the February 9 meeting that additional delineation of potential soil contamination be performed in areas where previous investigations had detected TPH concentrations on the order of 200 to 500 mg/kg in soil at scattered locations under a building about 1/2 mile from the nearest surface water body. Based on the Port's experience at other sites, this type of occurrence is not likely to cause a threat to human health or the environment because the concentrations of TPH are low, the site is paved and covered over by a building, and TPH (if migrating in groundwater) would be detected at downgradient wells before encountering surface water. The Port was concerned that some of the discussion at the meeting indicated that Ecology might have considered accepting the Port's proposed scope of work as an initial step, but that it would also eventually require collection of additional data collection that would not be relevant to a cleanup focused on the groundwater-to-surface water pathway. The Port is proceeding with the understanding, however, that the groundwater-to-surface water pathway is the focus of the independent work, and that there is no current expectation of collecting data that is not relevant under that approach.

Timeline/Submittals/Review Process

It is the Port's understanding that Ecology has requested that the completion of hydrologic work that would be relevant to the Terminal 91 Tank Farm Site Agreed Order RI/FS activities be completed within the same timeframe as work being performed under the Agreed Order. A timeframe for the remaining work was not established, but the Port would continue to make progress toward completing the scope of work agreed upon at the February 9 meeting. This scope of work consists of the the work described in Roth Consulting's December 10, 1998 submittal to Ecology entitled "Proposed Additional Work, Terminal 91 Upland Independent Cleanup", as modified by discussions at the February 9 meeting (summarized in the draft minutes).

Port of Seattle agreed to submit semi-annual status reports to Ecology that would report on work done during the previous six months and work planned for the next six months. The Port assumes that the first status report would be due approximately six months after signing up for the VCP. With each semi-annual status report, the Port would send copies of the reports completed during the previous six months on cleanup activities at the site.

Summary

We believe that the discussions with Ecology have allowed us to jointly identify the possible risks associated with the site that require attention, and to agree on a basic

approach to addressing those risks. The Port looks forward to implementing the proposed scope of work for cleaning up the site. The VCP approach will allow us to focus resources on the cleanup and to avoid spending our time and money (Ecology's and the Port's) on a more formal cleanup process.

However, performing the cleanup through the VCP requires that the Port and Ecology be able work through issues that arise along the way. As you know , we have had difficulty in resolving some issues in the past. The situation discussed above, as to whether to gather more data on site specific areas of minor soil contamination, even while we agree that the groundwater to surface water pathway is the focus of concern, is an example of a fundamental difference between the approach you have taken and what we believe is appropriate. At this point it is not productive to understand exactly why we have encountered the difficulties that we have. The more important consideration is to find a way that the Port and Ecology can move forward with determining necessary cleanup measures.

I understand that you are taking a leave of absence from the Terminal 91 site manager role. I wish you the best in your new responsibilities. It is our understanding that Galen Tritt will be assigned as site manager in your absence. Galen has knowledge of the site from his extensive past contact with it, and we have been able to work effectively with Galen to resolve issues in the past, even when there was disagreement. The Port is ready to implement the proposed scope under the VCP provided that that Galen will be the site manager.

Enclosed is our completed application for the VCP. The Port is in the process of preparing a check for $500, which is expected to be completed by Friday, March 12. As soon as the check has been prepared, we will make sure that the check is hand-delivered to your office to accompany the enclosed application.

We look forward to working Ecology in the ongoing cleanup activities at Terminal 91. If you have any questions or comments regarding this submittal, please call me at (206) 728-3192.

Sincerely,

Douglas A. Hotchkiss
Senior Environmental Project Manager

Cc: Tom Newlon, Port of Seattle
Brian Knox, Preston Gates and Ellis
Susan Roth, Roth Consulting
Julie Sellick, Ecology
Hideo Fujito, Ecology
Galen Tritt, Ecology

Voluntary Cleanup Program

VCP

Washington State - Department of Ecology - Toxics Cleanup Program

Request For Assistance/ Review Form

Have you discussed this site with an Ecology representative in the past? Yes
If yes, what is that person's Name? Galen Tuitt, Hilda Fujita, Sally Sofiales
And the approximate date? Multiple occasions since
Is this a leaking underground storage tank site? (includes piping leaks) site includes leakage from tanks

Please submit the following with this signed form to the appropriate Ecology office (see back of form)

[X] Site Summary (ECY 020-73)	[X] Any other existing reports on this site: yes
[X] A Check or Money Order for $500 made out to "Department of Ecology"	

Applicant completes this section: *(Note: The applicant is responsible for all billings)*

Applicant Name: Port of Seattle by Doug Hotchkiss		Phone:	206-728-3192
Applicant Address: P.O. Box 1209			
City: Seattle	State: WA.	Zip:	98111
Site Name: Terminal 91 Uplands	Alternate Name:		
Site Address: 2001 W. Garfield			
City: Seattle	State: WA	Zip: 98119	County: King
Site Owner Name: Port of Seattle			
Site Owner Address: P.O. Box 1209		Phone:	206-728-3192
City: Seattle	State: WA	Zip:	98111

I, Port of Seattle by Douglas A. Hotchkiss request the assistance of the Department of Ecology. With this Application I have enclosed $500. I understand that: this payment is the equivalent of approximately eight (8) hours of staff review and/or assistance on the cleanup of my contaminated site; actual charges will depend on specific staff and charge-out rates of that staff; if total charges are greater than $500, I will be billed for and I agree to pay the remainder; and any excess payments will be refunded to me.

Douglas A. Hotchkiss f. Port of Seattle 9 March '99

Signature of Applicant Date

Note: The applicant is responsible for all billings.

For Office Use only:			
Date:	Hours:	Rate:	Staff Name:
Date:	Hours:	Rate:	Staff Name:
Date:	Hours:	Rate:	Staff Name:
Date:	Hours:	Rate:	Staff Name:

RECEIVED
MAR 11 1999
ROTH CONSULTING

For Office Use only: **Receipts**
Amount Date Pd Rec. #

For FISCAL USE ONLY

173-02-94-005000-5000- - -
(LUST/Non-LUST) (Office)

LUST/Non-LUST: LUST - 30 Non-LUST - 20
OFFICE: NWRO - 40 SWRO - 50 ERO - 60 CRO - 70 IND - 80 HDQR - 90

Voluntary Cleanup Program

Washington State - Department of Ecology - Toxics Cleanup Program

Site Summary

This Summary is a required component of your request for assistance under the Voluntary Cleanup Program

Which of the following apply?

- [ ] Requesting assistance on a planned cleanup
- [x] Requesting assistance on an ongoing cleanup.
- [ ] Requesting review of a completed cleanup.

Note: If you submitted your Request for Assistance (ECY 020-74) previously without a Site Summary (this form) or this is a revised Site Summary, Please provide this completed form to Ecology at least five (5) working days prior to the meeting/site visit/documentation review (whichever comes first).

A) Site Identification:

Name of Site: Terminal 91 Upland

Alternate Name(s) for Site:

Street Address of Site: 2001 W. Garfield St.

City: Seattle State: WA Zip: 98119

County: King UBI Number: 178003644 (Port of Seattle)

Mailing Address (if different from above): Port of Seattle, P.O. Box 1209

City: Seattle State: WA Zip: 98111

Township 25N Range 3E Section Quarter-Quarter

If Known:

Latitude: Degree Minute Second

Longitude: Degree Minute Second

Method used to calculate Latitude and Longitude:

How large (in acres) is the site? 120 acres

Please attach two maps to this form. see Kennedy/Jenks Consultants. 1997. Terminal 91 Baseline Report

1) An area map, showing general location of the site in relation to surrounding bodies of water, cities, highways, and streets. (Please mark site location.)

2) A site diagram showing surrounding cross-streets, labeled building outlines, sampling and well locations, etc.

B) Person/Organization Making Request for Assistance/Review:

Name: Douglas A. Hotchkiss

Firm: Port of Seattle

Street Address: 2711 Alaskan Way, Pier 69 (mailing address P.O. Box 1209)

City: Seattle State: WA Zip: 98121 (mailing 98111)

Telephone Number: 206-728-3192 Extension:

Fax Number: 206-728-3188 e-mail address: hotchkiss.d@portseattle.org

Which best describes your involvement with the site? (Check as many as apply.)

Current Owner	[x]	Former Owner	[ ]	Potential Purchaser	[ ]
Current Operator	[ ]	Former Operator	[ ]	Other (specify)	[ ]
Environmental Consultant	for				
Attorney	for				
Insurance Carrier	for				
Other (specify)	for				

C) Release Information:

Date of Release (if known): historic Date of Discovery: *

Drinking Water: Number of Drinking Water Supply Wells within 1/2 mile 0

Are there any drinking water systems affected? [ ] yes [x] no

If yes, has alternate drinking water been provided? [ ] yes [ ] no

If Drinking Water systems are affected, are the systems public, private, or both?

Aquatics: Are there an creeks, streams, ponds, wetlands, or shorelands...

on or adjacent to the site? [x] yes [ ] no

Within 1/4 mile of the site? [x] yes [ ] no

Where are they located? see maps in Baseline Report

Are they impacted by contamination from the site? [ ] yes [ ] no unknown

General Hazardous Substance Categories: Please complete the chart below. List the contaminants known or suspected at the site prior to cleanup, and mark the appropriate medium (i.e. soil) with: **C** (confirmed and above MTCA); **B** (confirmed but below MTCA); **S** (suspected); N/A (not-applicable); **O** (tested and not present); or **U** (unknown).

Contaminant	Class *(for office Use*	Affected Soil	Media: Ground-Water	Surface Water	Air	Sediment	Date of Release *(if known)*
Example: Lead		C	O	S	U	S	1967-82
1) TPH		C	C	U	U	N/A	
2) PCBs		C	U	U	U	N/A	
3) BTEX		C	C	U	U	N/A	
4) Semivolatiles		B	U	U	U	N/A	
5) VOCs		B	U	U	U	N/A	
6) Metals		B	U	U	U	N/A	

D) Report Information of Assessment or Remediation Work Done to Date

Assessment:

Has site assessment work been done at this site? yes [x] no [ ] In-progress [ ]

If yes, when? * Were results reported to Ecology? yes [x] no [ ] Date *

Describe: (list reports in "E" below)

*see Baseline Report

Remediation:

Has any site cleanup work been done at the site? yes [x] no [ ] in-progress [x]
If yes, please continue to answer the remaining questions in this section to the best of your ability.

When was the cleanup work done? *
Were results reported to Ecology? yes [x] no [ ] date April 1997 (Baseline Report) and previous individual report submittals
Describe: (list reports in "E" below)

*

Does contamination remain on-site after cleanup activities? yes [x] no [ ]
If yes, describe: (list reports in "E" below)

*

For each contaminant listed in ***Part C) Release Information (above)***, please describe the quantity of the contaminant (in pounds) which was removed or treated as a result of the cleanup activities:

*

Contaminant	Class *(for office Use*	Pounds of Contaminant: Incinerated	Washed	Removed	Treated	*Contained)*
Example: Lead		10	20	40	10	60
1)						
2)						
3)						
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						

As a result of the cleanup:
How many acres of land were returned to ***unrestricted*** use?
How many acres of land were returned to ***restricted*** use?
How many cubic feet of contaminated soil was remediated or contained?
How many gallons of contaminated soil was remediated or contained?
How many people are now at reduced risk as a result of the cleanup action?
How many pounds of potential pollution was prevented as a result of the cleanup action?

N/A--cleanup in progress

*see Baseline Report

Methods/Treatments Used	Soil	Groundwater	Surface Water	Drinking Water	Air	Wastes
Method A	excavate	monitor				
Method B						
Method C	excavate	monitor				
Have these levels been met through the site ? Y or N	N	N				
Destruction or Detoxification						
Carbon Adsorption[1]	N/A					N/A
Biological Treatment					N/A	
Chemical Destruction						
Incineration		N/A	N/A	N/A		
[1]Carbon followed by regeneration: use of granular activated carbon followed by landfilling would be classified in these tables as volume reduction and off-site landfill						
Media Transfer						
Air stripping/Air Sparging	N/A					N/A
Aeration/Vapor Extraction		N/A	N/A	N/A	N/A	
Thermal Desorption		N/A	N/A	N/A		N/A
Immobilization						
Vitrification		N/A	N/A	N/A		
Solidification/Stabilization		N/A	N/A	N/A		
Reuse/Recycling[2]						
Specify						
[2]For example, reuse of free petroleum product recovered in a pump and treat system.						
Separation/Volume Reduction						
Solvent Extraction		N/A	N/A	N/A		
Soil Washington		N/A	N/A	N/A		
Physical Separation[3]						
[3]For example, oil/water separators.						
Land Disposal/Containment						
Containment or On-site Landfill			N/A			
Off-site Landfill	X	N/A	N/A	N/A		
Institutional Controls	**	**				
Specify						
Others						
Specify Treatment Method						

**to be determined after cleanup completed

E) Documentation:

Please list titles of all site reports below. Include name of consulting firm and year completed. (If there is not enough room for the entire list, please attach additional page(s) as necessary.)

Title:	By:	Date
Terminal 91 Baseline Report	Kennedy/Jenks Consultants	April 1997
additional reports are referenced in Baseline Report		

Is additional information concerning the contaminants treated or removed, or cleanup or remediation methods used available in a data base? yes ☐ no ☒ If yes, what programming software is use?
Is a copy included for our use? yes ☐ no ☐

F) Property Type: Commercial ☐ Industrial ☒ Residential ☐ Other ☐ (Please specify)
Property currently being used? yes ☒ no ☐
Plans for change in use? yes ☐ no ☒ If yes, please specify:

G) Standard Industrial Classification (SIC) Codes:

List all that apply. If none apply, or if you don't know your SIC code, list activities conducted at the site (i.e. automotive repair and maintenance, construction equipment storage, etc.).

(not including Agreed Order tank farm)--auto storage and minor maintenance, chill facilities, marine cargo warehouses, pipeline transfer of marine fuels

H) Dangerous Waste Facilities:

Does the facility have a dangerous waste identification number? yes ☒ no ☐
If yes, what is the number? WAD

I) Tank Information:

Complete this table for ALL tanks, whether underground (UST) or aboveground (AST), including unregulated tanks. see Table 2, Baseline Report
(*Unleaded, leaded diesel, bunker-C, waste oil, heating oil, aviation fuel, other (identify))
(** Tank status: Left in Place, Removed, Closed in Place)

Tank ID	AST/UST	Size	Was Free Product encountered? *Product	On GW	In Excavation	**Tank Status

J) Owner/Operator History
(Please photocopy and attach copies if additional owners and/or operators are known.)

Type (code) of Owner/Operator (for below):
Private (1) Municipal (2) County (3) Federal (4) State (5) Tribal (6) Mixed (7) Other (8) Unknown (9)
Public Entitle Acquisition via Bankruptcy (11)

1) Current Site Owner: Port of Seattle		Type: 8 (public port)
Street Address: 2711 Alaskan Way, Pier 69		
City: Seattle	State: WA	ZIP: 98121
Contact Persons (if different than owner, above): Douglas A. Hotchkiss		
Street Address: same; mailing address P.O. Box 1209, Seattle, WA 98111		
City:	State:	ZIP:
Telephone Number: 206-728-3192	Extension:	
Fax Number: 206-728-3188	e-mail address: hotchkiss.d@portseattle.org	
Dates of Ownership: 1976 to present		

2) Current Facility Operator: various, see Baseline Report		Type:
Street Address:		
City:	State:	ZIP:
Contact Persons (if different than owner, above):		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of Operation: to		

3) Former Site Owner: various, see Baseline Report		Type:
Street Address:		
City:	State:	ZIP:
Contact Persons (if different than owner, above):		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of Ownership: to		

4) Former Facility Operator: various, see Baseline Report		Type:
Street Address:		
City:	State:	ZIP:
Contact Persons (if different than owner, above):		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of Operation: to		

K) Other Involved Parties:
(Please photocopy and attach copies if additional parties are involved)

1) Environmental Consultant: Susan J. Roth		
Representing: Port of Seattle		
Firm: Roth Consulting		
Street Address: 6236 27th Ave. NE		
City: Seattle	State: WA	ZIP: 98115-7114
Telephone Number: 206-526-8494	Extension:	
Fax Number: 206-523-3155	e-mail address: rothsj@aol.com	

2) Site Control Person if other than Owner/Operator. (This must be a person who is on-site during normal working hours and is authorized and qualified to answer questions about the site, or a person who is available during normal business hours and has knowledge about the site and the remediations.		
Name:		
Relation to site/owner/operator:		
Firm:		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of involvement with site:	to:	

3) Name:		
Relation to site/owner/operator:		
Firm:		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of involvement with site:	to:	

4) Name:		
Relation to site/owner/operator:		
Firm:		
Street Address:		
City:	State:	ZIP:
Telephone Number:	Extension:	
Fax Number:	e-mail address:	
Dates of involvement with site:	to:	

Redlined Version of Text

TERMINAL 91 TANK FARM LEASE PARCEL

RCRA PERMIT RENEWAL APPLICATION

MASTER TABLE OF CONTENTS

ATTACHMENTS

SECTION A
PART A OF THE RCRA PERMIT APPLICATION

TABLE OF CONTENTS

LIST OF FIGURES

SECTION A. PART A OF THE RCRA PERMIT APPLICATION

40 CFR 270.10(d), 270.11(a) and (d), 270.13
WAC 173-303-806(2), 810(2), 810(12)(a), 810(13)
WAC 173-303-610(b)(1)

A1.0 BACKGROUND INFORMATION

A1.1 Revisions Included in Part A Application for Part B Permit
Revised, July 1990, September 1990, December 1990, November 1991, August 2002

Several changes were made to the interim status Part A dated February 18, 1986 to be consistent with the current status of operations at the permitted Terminal 91 Tank Farm Lease Parcel, which consists of a four-acre parcel formerly operated by Burlington Environmental Inc. ("Burlington") under a lease from the Port of Seattle (the "Port"), the past and current owner for purposes of the Permit. (For purposes of this Permit renewal application, the definitions that were set forth in Agreed Order No. DE 98HW-N108 by and among the Washington Department of Ecology ("Ecology"), Burlington, the Port and Pacific Northern Oil Corporation ("PNO") and made effective April 10, 1998 (the "Agreed Order") will be used). A copy of the Agreed Order is enclosed with this application.

Burlington makes these revisions consistent with WAC 173-303-610 (Closure and post-closure) and the corrective action requirements identified in the operating permit for the facility dated August 26, 1992 (i.e., the "Part B Permit") and permit modification dated June 17, 1998, which incorporates additional property owned by the Port into the permit for purposes of conducting corrective action. The revisions in this permit renewal application reflect two main developments that have occurred since 1992.

(1) Burlington ceased all active dangerous waste treatment and storage operations at the facility in 1995. In 1997, Burlington completed above-ground decontamination and closure of facility units that had previously managed dangerous waste. Dangerous waste handling activities no longer occur at the facility. In 2003, Ecology approved above-ground closure of the facility.

(2) Ecology modified the existing Part B Permit on June 17, 1998, adding two conditions that provide administrative procedures for corrective action at different parts of the facility owned by the Port. The first condition incorporates the Agreed Order to

provide for corrective action relating to the Tank Farm Lease Parcel (that is, the four-acre facility where Burlington operated the permitted dangerous waste treatment and storage operations until 1995). The second condition provides for corrective action at the remainder of contiguously owned property through a Model Toxics Control Act ("MTCA") voluntary cleanup process, which has since replaced the independent remedial action process that was in place in 1998. Together these conditions govern the only activities proposed to occur under this renewed permit, namely, corrective action activities. As such, Sections VI.B.1 and VI.B.2 of the Part B Permit will be the only operative portions of the renewed Part B Permit.

As a result of these developments, much of the information typically required in Part A and Part B permit applications is not pertinent to this application, and, therefore, is omitted. Burlington and the Port submit this dangerous waste permit renewal application for the sole purpose of ~~ongoing closure and~~ corrective action activities at the facility.

Part A Information

All information submitted in Part A of this Permit Renewal Application (the "Application") is solely for the purpose of renewing and extending the Part B Permit for corrective action activities. These revisions include:

FORM 1, Section II

Burlington completed above-ground closure of all dangerous waste treatment and storage units at the Tank Farm Lease Parcel in 1997 under a closure plan (as revised) approved by Ecology in October 1996. Burlington subsequently terminated its lease of the Tank Farm Lease Parcel in 1997 and has had no presence at the Site following termination of the Port lease, except as required for corrective action under the Part B Permit and the Agreed Order. The Port continues to own the Tank Farm Lease Parcel, and new operators have taken legal control of the Tank Farm Lease Parcel for operations not related to treatment and storage of dangerous waste. Burlington will remain the "operator" in the Application for the sole regulatory purpose of meeting the applicable corrective action requirements of the Agreed Order. The Port is the owner of the Tank Farm Lease Parcel, but has never operated a permitted dangerous waste

treatment, storage, or disposal facility at the Tank Farm Lease Parcel. Ecology approved above-ground closure of the facility in 2003.

FORM 1, Section III

Burlington has revised this section of the Application to identify the appropriate current Burlington contact personnel.

FORM 1, Sections IV, VI and VII

Burlington has revised this section of the Application replacing the former facility mailing address and phone number (as in the former Part A) with the current corporate mailing address and phone number for Burlington's regional office location. Burlington currently has no operations or personnel located at the Tank Farm Lease Parcel. In Section VI, the SIC Codes also have been removed as all waste management operations at the Tank Farm Lease Parcel were terminated and, as such, the Codes are no longer relevant or applicable.

FORM 1, Section IX

Burlington has revised this section of the Application to show changes to the map of the Tank Farm Lease Parcel (as necessary) to reflect the closed facility structures including former dangerous and non-dangerous waste treatment and storage units and structures at the Tank Farm Lease Parcel.

FORM 1, Section X

Burlington closed its operations in 1995 and left the Tank Farm Lease Parcel in 1997. Burlington is not currently conducting any business at the Tank Farm Lease Parcel. Burlington engages in corrective action at the Site under the applicable requirements of the Agreed Order. The previous statement in this section regarding the Nature of the Business reads:

> *Pier 91 is a waste oil reclamation facility. By utilizing tank treatment, reusable oil is reclaimed by separating out the impurities (water, solids). Hazardous and non-hazardous wastewater is treated for contaminants such as metals, phenolics and*

solvents, and the treated wastewater is discharged to the sewer. Solids are centrifuged and sent off site for treatment and/or disposal. The Pier 91 Facility is also a generator, storer, and marketer of used oil fuel and hazardous waste fuel (dangerous waste fuel).

and has been revised in the Application to read as follows:

Burlington conducts no business activities of any kind or nature whatsoever at the Site. Burlington, the Port and PNO continue corrective action associated with historical contamination from fuels storage and waste oil operations, including Burlington's permitted waste management operations at the Site. Such corrective action, for which Burlington and the Port seek the renewal of this Permit, is implemented pursuant to the Agreed Order.

FORM 1, Section XI

Burlington has revised this section in the Application to state the name of the current corporate official, Jack Wolfin, Vice President, Northwest Region.

FORM 3, Section II

This section of the Application has been revised to state that the Tank Farm Lease Parcel received a final RCRA operating permit.

FORM 3, Section III

This section of the Application is no longer applicable so identification of storage and treatment capacities was omitted, as Burlington no longer conducts any regulated dangerous waste activity at the Tank Farm Lease Parcel.

FORM 3, Section IV

This Section of the Application is no longer applicable as Burlington no longer conducts any regulated dangerous waste activity at the Tank Farm Lease Parcel. However, the NAIC code for hazardous waste management was included in this section per Ecology's request.

FORM 3, Section V

The facility drawing in the Application has been revised to show the updated layout for the Tank Farm Lease Parcel [as well as former lease boundaries and facility structures]. In addition, two new drawings have been provided to more clearly identify the Tank Farm Lease Parcel.

FORM 3, Section VI

Updated photos of the Tank Farm Lease Parcel have been added to show the current view of the Tank Farm Lease Parcel and surrounding area and facilities currently in operation following closure of the permitted waste management operations at the Tank Farm Lease Parcel.

FORM 3, Section IX

The owner certification signature in the Application has been changed to Mic Dinsmore, Chief Executive Officer, to reflect a change in authorized corporate personnel at the Port.

FORM 3, Section X

Burlington has identified a current corporate officer for certification and signature in the Application. The current duly authorized officer is Jack Wolfin, Vice President, Northwest Region.

SECTION A2.0
PART A DANGEROUS WASTE PERMIT FORMS 1 AND 3
Revised, Jan. 1990, Sept. 1990, Dec. 1990, Nov. 1991, Aug. 2002

SECTION B

FACILITY DESCRIPTION AND GENERAL PROVISIONS

TABLE OF CONTENTS

LIST OF FIGURES

B1.0 GENERAL FACILITY DESCRIPTION

40 CFR 270.14 (b) (1), (10), (19)
WAC 173-303-806 (4) (a) (i), (x), (xi), (xviii)
Revised, December 1990, July 1991, November 1991, August 2002

Facility Name	Terminal 91 Tank Farm Site USEPA/Ecology Facility Identification Number: WAD000812917	
Current Site Occupant/Lessee (Note that dangerous waste treatment and storage operations no longer occur at the site, and there are no current tenants.), ~~and that current occupant is not a party to this permit).~~	Name Address Phone	There are no current tenants at the Tank Farm Lease Parcel. The tank farm is being maintained and monitored by Delta Western as required by spill prevention regulations. ~~Fuel and Marine Marketing~~ ~~c/o Port of Seattle Terminal 91~~ ~~2001 West Garfield Street~~ ~~Seattle, Washington 98119~~ ~~(206) 938-6500~~
Operator	Name Address Phone	Burlington Environmental Inc., a wholly owned subsidiary of Philip Services Corporation 955 Powell Avenue, SW Renton, WA 98055 (800) 228-7872, (425) 227-0311
Owner	Name Address Phone	Port of Seattle PO Box 1209 Pier 69 Seattle, WA 98111 (206) 728-3000

The Terminal 91 Tank Farm Lease Parcel is located at 2001 West Garfield Street, at the Port of Seattle's Terminal 91 Complex in Seattle, King County, Washington. Refer to Figures B1-1a and B1-1b for ~~a S~~site location ~~M~~maps. Land use for the facility is zoned by the City of Seattle as General Industrial Zone 1, with a 45' height limit (IGI U/45). Figure B2-1 shows the zoning for the area surrounding the Terminal 91 Tank Farm Lease Parcel.

The Port is the owner of the Terminal 91 Tank Farm Lease Parcel formerly leased and operated by Burlington, which leased property consisted of three tank yards and associated buildings located on approximately four acres within the 216-acre "Terminal 91 Complex" as shown on Figures B1-1a and B1-1b. Burlington and the Port terminated the lease for the Tank Farm Lease Parcel and Burlington completed the closure of above-ground treatment and storage units at its permitted operations in approximately 1997. The former Burlington operations at the Tank Farm Lease Parcel were divided into the following general areas, which still exist today, as shown in Figure B1-2:

- The Black Oil Yard
- The Marine Diesel Oil Yard
- The Small Yard
- The Main Warehouse

The Black Oil Yard and the Marine Diesel Oil Yard are surrounded by concrete product-containment walls approximately 15 feet high. All three tank yards are fully paved with concrete. During the period of operations, Burlington used aboveground and subsurface piping systems to transfer product and waste streams within the tank yards. A main warehouse was located just north of the three tank yards.

The Tank Farm Lease Parcel and surrounding area remains situated on relatively flat-lying ground and is covered by either asphalt or concrete, except for a narrow strip of unoccupied space situated between the seafood processing building (Building M-28) and the Marine Diesel Oil Yard.

B1.1 Facility Owner/Operator

Burlington (then known as Chemical Processors, Inc. or "Chempro")[1] leased the Site from the Port beginning in approximately June 1971. Burlington notified USEPA of its

[1] In January 1992, Chemical Processors, Inc. changed its name to "Burlington Environmental Inc." Philip Environmental Inc., a Toronto based company, purchased Burlington, and Burlington became its wholly owned subsidiary in December 1993. Philip Environmental Inc. subsequently changed its name to "Philip Services Corporation". Burlington has from time to time conducted business under both the names "Philip Environmental" and "Philip Services Corporation" in recognition of the parent company.

dangerous waste activities at the Site on or before November 19, 1980 and was granted interim status under RCRA regulations for its dangerous waste management operations at the Tank Farm Lease Parcel. Thereafter, Burlington was issued a Part B RCRA permit effective August 22, 1992 for the continued operation of a permitted dangerous waste management facility at the Tank Farm Lease Parcel until September 1995.

From approximately 1974 through 1995, Burlington also sublet a large portion of the Tank Farm Lease Parcel (the Marine Diesel Oil Yard and the Black Oil Yard) to PNO for storage of non-regulated bunker oil and other fuels product. PNO used above-ground and underground piping systems at the Tank Farm Lease Parcel to transfer bunker oil and fuels within the Tank Farm Lease Parcel and other areas of the Terminal 91 Complex. In September 1995, Burlington ceased operations at the Tank Farm Lease Parcel and terminated its lease with the Port. Burlington commenced above-ground closure of all permit-related facility equipment, secondary containment, and treatment units pursuant to a closure plan approved by Ecology. Burlington submitted an engineer-certified closure report to Ecology documenting completion of all requirements of the surface facility closure plan in 1997. In 2003, Ecology approved the certification of ~~above-ground~~aboveground clean closure that Burlington submitted in 1997.

Following Burlington's surface closure action in 1997, PNO entered a new lease for the entire Tank Farm Lease Parcel and continued operation of its non-regulated bunker oil, lube oil, and fuels product storage and blending facility. Neither the Port nor PNO has conducted permitted dangerous waste operations at the Tank Farm Lease Parcel at any time before or after Burlington ended its operations in 1995. Burlington, the Port and PNO continue to implement corrective action at the Site pursuant to the Agreed Order (No. DE 98HW-N108) effective April 10, 1998.

In 1999, PNO terminated its lease with the Port and discontinued its fuels product and blending operations at the Site. Subsequently, the Port entered into an agreement with Fuel and Marine Marketing ("FAMM"), ~~and that entity now~~which ~~conducts~~ conducted bunker oil and fuel product storage, blending and marketing operations at the Tank Farm Lease Parcel until January 2003. FAMM ~~has~~ sub-leased the lube-oil portion of the operation to Rainier Petroleum during that time period. Rainier continued to lease a portion of the Tank Farm Lease Parcel until June 2003. ~~Note that current occupant/lessee (i.e., FMM)~~ Neither FAMM nor Rainier Petroleum ~~does not~~ engaged in

regulated dangerous waste treatment or storage operations at the Tank Farm Lease Parcel. ~~FMM continues to use the tank facilities formerly operated by Burlington, including underground and above-ground piping systems, for the transfer, storage and blending of bunker oil and other fuel products. At this time, FMM is not a party to the Agreed Order or involved with Site corrective action~~ Currently there are no tenants at the Tank Farm Lease Parcel. The tank farm is being maintained and monitored by Delta Western as required by spill prevention regulations. ~~In 2003, Ecology approved the certification of above-ground clean closure that Burlington submitted in 1997.~~

B1.2 Terminal 91 Complex History

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background information relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.3 Site History

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility. The Agreed Order, which will be incorporated into the final Permit for corrective action at the Facility, contains a complete site history.

B1.4 Materials Historically Handled at the Site

This section has been omitted from the Application as the information requested is no longer applicable. To the extent such information is relevant to corrective action at the Facility, such information is set forth in the Agreed Order and documents prepared in connection with past and present site characterization and corrective action at the Facility. The documents relevant to corrective action at the Facility are set forth in Section E.2.

B1.5 Plant Management

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Site.

B1.6 Summary of Waste Types Listed in the Part A

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.7 Tank Storage and Treatment Operations

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in prior sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

B1.8 Detailed Process/Activity Descriptions

~~This section has been omitted from the Application as the information requested is no longer applicable.~~ With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

The only other activity at the site related to corrective actions is traffic. In order to perform corrective actions at the site, field teams use the site on approximately a monthly basis to perform maintenance on a passive free-product recovery system, and groundwater monitoring on a semiannual basis. There is infrequent use of the site for other corrective action field projects, which typically occur 1-3 times a year. Figure B2-4 shows the general traffic patterns used for monthly maintenance and monitoring activities. ~~There was not a~~No map is available of the newly constructed exit ramp that

extends from Elliott Avenue to the southern guard shack. ~~However, t~~This is the entrance used most often by field teams. The team ~~would~~ travels directly from the guard shack to the access roads on the west, south or east sides of the tank farm.

B2.0 TOPOGRAPHIC MAPS

Revised, January 1990, November 1991, August 2002

40 CFR 270.14 (b) (19)
WAC 173-303-806 (4) (a) (xviii)

The following figures referenced in this Section B2.0 describe topographic features at the Site in conformance with the topographic requirements cited above revised as of August 2002. Individual figures were provided to reduce the amount of overlapping information. Each figure in this section highlights certain features as follows:

- Figure B1-1 shows the location of the Terminal 91 Complex, in relation to the greater Seattle area and topographic features.
- Figure B1-2 shows the legal boundaries of the Tank Farm Lease Parcel, security features, the main operating areas of the Tank Farm Lease Parcel, and monitoring well locations.
- Figure B2-1 shows the adjacent land use.
- Figure B2-2 shows on-site surface water flow or drainage patterns.
- Figure B2-3 shows the wind patterns including a wind rose of the area near the site.
- Figure B2-4 shows the traffic patterns at the site related to corrective action activities.
- Figure B2-5 shows the 100 Year Floodplain in relation to the Tank Farm Lease Parcel.

SECTION C

WASTE CHARACTERISTICS

This section has been omitted from the Application as the information requested is no longer applicable. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

SECTION D

PROCESS INFORMATION

~~This section has been omitted from the Application as~~ Burlington no longer conducts processing ~~or any operations~~ at the Tank Farm Lease Parcel. With information provided in prior sections of this application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility.

Dangerous wastes have not been generated during ongoing site investigative activities. Light non-aqueous-phase liquid ("LNAPL") containing polychlorinated biphenyls ("PCBs") that is generated from specific monitoring wells onsite is handled and disposed in accordance with the Toxic Substances Control Act (40 CFR 761.60). Until completion of the Feasibility Study and Cleanup Action Plan, the final corrective action requirements for the Site will not be known. However, if dangerous wastes are generated during corrective actions, those wastes will be handled in accordance with the Dangerous Waste Regulations (WAC 173-303).

SECTION E

RELEASES FROM SOLID WASTE MANAGEMENT UNITS

TABLE OF CONTENTS

SECTION E RELEASES FROM SOLID WASTE MANAGEMENT UNITS

806(4)(a)(xxiii) and (xxiv), 645, 646, [270.14 (d)]

~~Much of the information typically required for this section has been omitted from the Application. Relevant current information is provided in other sections of this Application, and all other information regarding releases, which is relevant for purposes of corrective action at the Site, is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Site.~~ The RCRA Facility Assessment ("RFA") that was prepared by the EPA in 1994 identified solid waste management units ("SWMUs") and areas of concern ("AOCs") at the Terminal 91 Complex, including the Tank Farm Lease Parcel. Work in progress under the Agreed Order for the Tank Farm Site addresses only those SWMUs and AOCs that were associated with the Tank Farm Lease Parcel, as identified in the RFA.

Currently, the PLP Group for the Site, as defined in the Agreed Order, is addressing data gaps that were identified during preparation of the 1999 Draft Remedial Investigation/Data Evaluation ("RI/DE") Report. Those data gaps ~~and~~re being addressed under a "Bridge Document" process. The Bridge Document Report 1 ("BDR1") provided a preliminary exposure assessment that identified potential pathways and receptors for contaminants originating from the Tank Farm Lease Parcel, and confirmed that the Site ground water is non-potable under the MTCA regulations. Potential pathways identified included the ground water to surface water pathway and the soil to vapor pathway. A Work Plan for Additional Data Collection ("WPADC") was prepared to further address data gaps under the ground water to surface water pathway, and a Soil Vapor Sampling and Analysis Plan ("SVSAP") was prepared to address the soil to vapor pathway. Work is in progress under both of these plans and is scheduled for completion in early 2004. Also as part of the ongoing work, passive LNAPL recovery devices were placed in onsite monitoring wells and monthly LNAPL recovery activities are being performed.

After investigative activities associated with data gaps have been completed and relevant reports approved by Ecology, a risk assessment, feasibility study, and cleanup action plan will be prepared. Corrective action activities are expected to commence upon completion of the final cleanup action plan.

Work performed by Burlington under EPA oversight prior to the effective date of the Agreed Order is summarized in the following table. All reports were submitted to EPA's Region X office in Seattle:

Order	Work Performed Under EPA Oversight
3013	Phase I Hydrogeologic Investigation (Sweet-Edwards/EMCON 1988)--preliminary site characterization
	Phase II Hydrogeologic Investigation (Sweet-Edwards EMCON 1989)--additional hydrogeologic characterization
3008(h)	RCRA Facility Investigation ("RFI") (BEI 1995)--comprehensive site characterization, including soil sampling and quarterly groundwater monitoring activities through January 1998

Reports of investigative activities that were prepared under the Agreed Order are summarized in the following table. All reports were submitted to the Department of Ecology, Northwest Regional Office:

Reports Prepared Under Ecology Oversight ~~Title~~	Date
Draft Remedial Investigation/Data Evaluation Report	January 1999
Final Bridge Document Report 1	November 2001
Piezometer Installation Report	March 2002
Soil Vapor Technical Memorandum No. 2	October 2002
Tidal Study Report	November 2002
Draft Bridge Document Report 2	January 2003

Planned reports and their estimated dates of submittal to the Department of Ecology, Northwest Regional Office, are summarized in the following table. Actual transmittal dates have not been determined; the dates are estimates only based on current available information:

Reports To Be Submitted in the Future	Estimated Transmittal Date
Draft Bridge Document Report 3	March 2004
Final RI/DE Report	September 2004
Draft Risk Assessment and Feasibility Study Reports	September 2005
Draft Cleanup Action Plan	September 2006

E1 Releases

This section has been omitted from the Application. With information provided in other sections of this Application, all factual background relevant for purposes of corrective action at the Facility is set forth in the Agreed Order and documents prepared in connection with past and present corrective action at the Facility and the surrounding upland portion of Terminal 91 that is undergoing corrective action under this Permit.

All information relating to the locations where solid wastes have been ~~stored~~managed on the Tank Farm Lease Parcel was provided in the Solid Waste Management Report (EPA, 1988), which is the equivalent to a RCRA Facility Assessment. All locations where dangerous wastes were stored are shown on Figure B1-2 as "regulated units".

E2 Status of Corrective Actions

In 1994, a Resource Conservation and Recovery Act ("RCRA") Facility Assessment ("RFA") was completed by the U.S. Environmental Protection Agency ("EPA"). The RFA was part of the RCRA process for implementing corrective action at the dangerous waste treatment and storage facility located at the Tank Farm Lease Parcel at the Terminal 91 Complex. The RFA was expanded to include 124 acres of upland property at the Terminal 91 Complex owned by the Port, including the Tank Farm Lease Parcel. That upland property, excluding the Tank Farm Site, is sometimes referred to as the "upland" portion of Terminal 91. The upland portion of Terminal 91 was included in the RFA because the regulatory definition of "facility" for the purposes of corrective action includes contiguous property under control of the owner or operator of the dangerous waste treatment and storage facility. The RFA identified and labeled a number of

SWMUs and AOCs on the "upland" area and at the Tank Farm Lease Parcel that were present when the visual site inspection was performed on October 20 and 21, 1992 by EPA representatives.

Following the RFA, Ecology divided the cleanup of the Terminal 91 "facility" into two different processes. The cleanup of the Tank Farm Lease Parcel was provided for through an agreed order ("Agreed Order"). The Agreed Order took effect in April 1998, and was signed by Ecology, the Port, Burlington and PNO. The Agreed Order requires the Port, PNO and Burlington to investigate and cleanup releases that originated from the Tank Farm Lease Parcel, which is defined by the Agreed Order as follows.

> Tank Farm Lease Parcel consists of three tank yards and associated buildings and covers approximately 4 acres within the Terminal 91 Complex as shown in Exhibit 2 [of the Agreed Order].

~~Agreed Order, § II.5.~~

The Agreed Order requires cleanup of the "Site," which it defines as:

> The Tank Farm Lease Parcel and areas where releases of dangerous constituents originating from the Tank Farm Lease Parcel operations have come to be located.

~~Agreed Order, § II.4.~~

In a separate but related effort (noted in the Agreed Order), cleanup of releases at the upland area of the Terminal 91 Complex that were not related to the operations of the Tank Farm Lease Parcel are being addressed ~~solely~~ by the Port through Ecology's Voluntary Cleanup Program. The cleanup of these releases has been referred to informally as the "T91 Upland Cleanup."

~~Corrective~~ Permit requirements for corrective action under these two processes ~~is~~ are summarized separately below, first with respect to corrective action for the "Site" under the Agreed Order, and then with respect to corrective action of the "Upland" under the MTCA Voluntary Cleanup Process. A summary of these activities is provided in Section E2.1.

Site Cleanup. As mentioned in Section B of this permit renewal Application, Burlington, the Port, and PNO are implementing corrective action requirements at the Site under Ecology supervision pursuant to the Agreed Order. The Part B permit contains the following condition, added through a permit modification in June 1998, to provide for corrective action of the Site.

> VI.B.1. State Corrective Action Order number *DE 98HW-N108*, effective April 10, 1998, and its attachments (including any submittals approved, or any amendments or changes to any plans, reports, or schedules) are incorporated by reference and shall be taken and considered as a part of this permit the same as if they were fully set out therein. Order number *DE 98HW-N108* addresses the State Remedial Investigation and Feasibility Study (RI/FS) and the Draft Corrective Action Plan (CAP) requirement(s) of corrective action using RCW 70.105D; Hazardous Waste Cleanup-Model Toxics Control Act. Corrective action requirements are included in the order in a Schedule of Compliance as required by WAC 173-303-646(2)(c); Corrective Action. The order is included as an attachment to this permit modification.

Upland Cleanup. The Port and Pacific Northern Oil Corporation ~~is~~are conducting corrective action with respect to the Upland portion of the Terminal 91 Complex pursuant to the following condition in the Part B Permit:

> VI.B.2. The "Facility", for the purposes of RCRA corrective action, covers approximately 124 acres of the upland area at the Port of Seattle's Terminal 91. The state corrective action order is for the tank farm lease parcel and areas where releases of dangerous constituents originating from the tank farm lease parcel have come to be located. The tank farm lease parcel is approximately 4 acres. The remaining upland acreage will be investigated and remediated under the state's independent remedial action process as provided for in WAC 173-340-510. If this independent remedial action fails to provide the necessary protection of human health and the environment, the Department reserves the right to issue a state corrective action order that would cover the remainder of the upland area at Terminal 91.

To implement this corrective action requirement for the upland portion of the facility, the Port entered Ecology's Voluntary Cleanup Program pursuant to its VCP application dated March 10, 1999 and accompanying cover letter.

E2.1 Summary of RI/DE Findings

The Remedial Investigation Data Evaluation (RI/DE) Report, prepared and submitted to Ecology in 1999 pursuant to the Agreed Order, summarizes and analyzes investigative information collected by the parties to the Agreed Order. In addition, the RI/DE Report identifies data gaps, provides an evaluation of the horizontal and vertical extent of contamination at the Site, and discusses potential sources of contamination and potential contaminant transport mechanisms at the Site. This Report includes soil, groundwater, and storm drain sediment data collected at the Site through January 1998.

The nature and extent of light nonaqueous phase liquids ("LNAPL") accumulation and contaminants identified in soil and impacted groundwater at the Site is consistent with historic spills and releases related to numerous fuel-related and waste management operations at the Site. Total petroleum hydrocarbons ("TPH") and Benzene/Toluene/Ethylbenzene/Xylene ("BTEX") compounds represent the most widely distributed group of contaminants detected in studies at the Site. Volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs), polychlorinated biphenyls ("PCBs"), and metals have been found to occur in lesser concentrations and locations throughout the Site. In general, the greatest impacts to soil and groundwater occur beneath the tank yards within the Site.

The results of the groundwater monitoring program indicate that the distribution and concentrations of contaminants in groundwater beneath the Site have stabilized over time, with no significant fluctuations observed in the recent distribution or concentrations of contaminants in groundwater beneath the Site. However, a comparison between findings set forth in the RI/DE Report and the objectives identified in the Agreed Order showed the following data gaps:

1. Horizontal distribution of chemicals at the Site. The vertical distribution of chemicals at the Site appears to have been adequately characterized in prior studies. However, the horizontal extent of impacted soil and groundwater appears to extend beyond the boundaries of the monitoring network. Burlington, the Port and PNO, all

parties to the Agreed Order and designated as potentially liable parties ("PLPs") therein, have proposed incorporation of available data from adjacent properties into the existing data set to further define the horizontal extent of contaminants emanating from the Site.

2. Recommendations for revisions to the current groundwater monitoring program. The PLPs intend to use historical groundwater monitoring data, and information gathered through incorporation of data from adjacent properties to evaluate the current groundwater monitoring program and recommend appropriate revisions. The PLPs will prepare a comprehensive Groundwater Sampling and Analysis plan for the Site that includes identification of the proposed monitoring network, well purging sampling procedures, sample frequency, and proposed revisions to the current analytical methodology, as appropriate.

3. Identification of potential offsite source areas. The PLPs will assess information generated through incorporation of available data from adjacent properties to evaluate potential source areas located outside the boundaries of the Site.

4. Evaluation of the volume of LNAPL accumulations. The PLPs have characterized adequately the horizontal extent of LNAPL accumulations on the Shallow Aquifer beneath the Site. However, insufficient data is available to fully assess the actual volume and potential recoverability of these LNAPL accumulations. The PLPs have recommended performing a series of bail-down tests in wells with historic LNAPL accumulations to generate additional data to assess the actual volume of LNAPL available for potential recovery.

5. Expanded Beneficial Use Survey. The PLPs have recommended evaluation of existing data to establish the maximum beneficial use of groundwater potentially impacted by historical operations at the Site. (Note that this work already was performed and the results were described in the Proposed Final Bridge Document Report 1 dated November 21, 2001 (Roth Consulting 2001).

E2.2.1 Summary of Corrective Action Activities under the Agreed Order from 1998 to Present.

As a result of identifying the data gaps described in prior sections of this Application, the PLPs proposed additional work under Section V.4 of the Agreed Order. In June 1999, the PLPs submitted a letter to Ecology summarizing the proposed additional work,

which would be identified as "Bridge Document" work. At a subsequent meeting with Ecology to discuss the approach, the PLPs recommended that a piezometer be installed in the area between the Site and the Pier 89/90 Slip, and that a "Bridge Document" be prepared to evaluate existing site data with respect to potential cleanup activities. Based upon the significant data collected in prior groundwater monitoring at the Site, the PLPs also proposed a reduction in groundwater monitoring events from quarterly to semiannually. The PLPs and Ecology agreed to the terms of a reduced groundwater monitoring program, the installation of a piezometer, and the concept of the Bridge Document work. The terms of the revised groundwater monitoring program are contained in a letter to Ecology dated September 17, 1999 (Roth Consulting). A Proposed Piezometer Work Plan (Roth Consulting, 2000) was submitted to Ecology on August 21, 2000. The Bridge Document Work Plan (Roth Consulting, 2000) was submitted to Ecology on October 15, 2000.

The primary objective of the Bridge Document work was to optimize data collection activities so that future efforts can focus on site-specific cleanup goals. The approach for achieving this objective included the following tasks:

- Identify potential exposure pathways at the Site.
- Develop preliminary cleanup levels based on site-specific potential exposure pathways and potential cleanup alternatives.
- Identify data gaps that exist with respect to site-specific potential exposure pathways and potential cleanup alternatives.
- Collect additional data as necessary to address site-specific exposure pathway concerns and potential cleanup alternatives.

The first deliverable under this plan was the Proposed Final Bridge Document Report 1 (BDR1) (Roth Consulting, submitted to Ecology on November 21, 2001). This report summarized the work completed as of that date and proposals for subsequent work.

The work completed under the BDR1 included:

- Installation of two new piezometers southeast of the Site;
- Completion of a groundwater beneficial use study;

- Preliminary screening of exposure pathways;
- Development of groundwater screening levels based on site-specific exposure pathways; and
- Assessment of potential points of compliance for groundwater cleanup.

The Bridge Document Report 1 ("BDR1") provided a preliminary exposure assessment that identified potential pathways and receptors for contaminants originating from the Tank Farm Lease Parcel, and confirmed that the Site ground water is non-potable under the MTCA regulations. Potential pathways identified included the ground water to surface water pathway and the soil to vapor pathway. Ground water screening levels considered included federal and state surface water quality criteria and MTCA Method B surface water cleanup levels.

Subsequent work proposed in the Bridge Document included:

- Investigate the potential for ~~groundwater~~ volatilization from soil to indoor air as a pathway of concern at the Site;
- Conduct a background comparison for metals in groundwater detected at the Site;
- Complete a data evaluation to determine which data should be used for future risk based decisions; and
- Evaluate concentrations of chemicals of potential concern ("COPCs") in existing downgradient wells in the area of Terminals 90 and 91 downgradient of the Site to identify potential exceedances of groundwater screening levels which may be distinct and significant sources contributing to contamination in the area.

In May 2001, the PLPs submitted a Draft Soil Vapor Sampling and Analysis Plan (SAP) (PSC, 2001) to Ecology. VOCs were identified as the primary contaminants of concern with respect to the soil to vapor pathway. Figures showing the extent of these contaminants in groundwater were provided in the SAP. The PLPs implemented the plan in August 2001. This included installation of three permanent soil vapor ports in the Seafood Processing Building (Building M-28). This building represented the potential worst-case scenario for the soil to indoor air pathway. The soil vapor results

exceeded MTCA air cleanup standards, but when modeled to indoor air levels, the concentrations were well below risk-based screening levels. These data were summarized in the Soil Vapor Technical Memorandum No. 1 (PSC, 2001) submitted to Ecology in December 2001. The SAP required a second round of sampling to verify the results. Before the first quarter sampling occurred, Ecology requested some modifications to the SAP and subsequent report. Ecology required the PLPs to install another soil vapor port at the northwest end of the subject building. Following installation of the additional port, PLPs collected the second round of soil vapor samples in March 2002. Again, the soil vapor results exceeded MTCA air cleanup standards. But when results were compared to modeled indoor air levels, the concentrations were well below risk-based screening levels. In addition, the modeled soil vapor data were compared to modeled groundwater data, modeled soil data, and estimated indoor air concentrations using an attenuation factor of 0.001. All scenarios showed the soil vapor to indoor air pathway does not pose an unacceptable risk for this Site. The data are summarized in the Soil Vapor Technical Memorandum No. 2, which was finalized in June 2003 (PSC, 2002~~3, in progress~~) and approved by Ecology in July 2003. ~~that the PLPs will submit to Ecology in September 2002.~~

A tidal study also was performed in the summer of 2001 to assess the tidal influence in the area between the Tank Farm Lease Parcel and the downgradient wells that were installed in early 2001. A report of those findings ~~is in progress~~was transmitted to the Department of Ecology, Northwest Regional Office, in November 2002.

The PLP Group ~~is currently preparing~~submitted the Draft Bridge Document Report 2 (BDR2), ~~due~~ to Ecology in ~~early~~ January 2003. That report included:

- An update of groundwater screening levels and an updated COPC list
- ~~that will include~~A comparison of groundwater COPC concentrations with groundwater screening levels

- ~~:~~Recommendations for additional work to be performed as part of the BDR3, including LNAPL baildown tests to assess the recoverability of LNAPL at the site

~~The comprehensive data evaluation.~~

- A groundwater sampling and analysis plan ~~which will include new recommendations for the well network and analytical requirements for future monitoring.~~
- A work plan for additional data collection.

Polynuclear aromatic hydrocarbons ("PAHs") and metals were identified as the primary contaminants of concern with respect to the groundwater to surface water pathway. Figures showing the extent of these contaminants in groundwater were provided in the 2002 Annual Groundwater Monitoring Report (PSC, 2003).

The PLPs ~~will report the~~are performing the work ~~conducted~~ recommended ~~as part of~~in BDR2 ~~in~~ under the Work Plan for Additional Data Collection, and the findings will be~~a~~ reported in Bridge Document Report 3~~, and possibly, a fourth and Final Bridge Document Report~~ in early 2004. The PLPs anticipate that all information necessary to fill the existing data gaps will have been determined such that the PLPs may prepare a final RI document and/or begin preparation of a draft feasibility study.

E2.3 Status of Corrective Action at the Terminal 91 Upland from 1997 to Present

This section describes the corrective action activities that have been performed by the Port and/or its tenants at the upland portions of the Terminal 91 Complex as part of the Voluntary Cleanup Program ("VCP"). The activities described begin with the preparation of the Terminal 91 Baseline Report (Kennedy/Jenks 1997) prepared by the Port in response to a request from Ecology. That report summarizes the investigative and remedial activities the Port performed prior to April 1997, exclusive of the Site, and including a description of relevant SWMUs and AOCs that had been identified in the 1994 EPA RFA.

After submission of the Baseline Report, the Port and Ecology agreed further action was required on the following SWMUs, AOCs, and other areas where conditions indicate past releases:

- SWMU 30—Pipeline Break
- AOC 2—Tanks A-G
- AOC 6—Hydrocarbon Contamination, Building 40
- AOC 7—Concrete Aprons/1991 Soil Investigation for Pier 90 Chill Facility
- AOC 9—Contaminated Soil NW Corner of Pier 91
- AOC 11—Old Tank Farm
- 1994 DAS Utility Trench Investigation
- 1996 PNO Pipeline Alignment Soil Remediation, Pier 90
- 1996 PNO Pipeline Break, Pier 91.

The SWMUs and AOCs were identified in the 1994 RFA report. The other areas where conditions indicate past releases were identified in the Terminal 91 Baseline Report (Kennedy/Jenks Consultants 1997).

In June 2000, the Terminal 91 Upland Independent Cleanup Proposed Work Plan No. 1 (Roth Consulting 2000) was transmitted to Ecology. That Work Plan identified activities the Port and/or its tenants will perform to address the areas considered to have the highest priority for initial work due to their locations downgradient of the Tank Farm Lease Parcel. As part of the work described in that Work Plan, five downgradient groundwater monitoring wells were installed in early 2001, and a tidal study was performed in conjunction with the tidal study at the Site (described above). Reports of those activities ~~are in progress~~were provided to Ecology in the Downgradient Well Installation Report (Roth Consulting 2002) and the Tidal Study Report (Port of Seattle 2002).

PNO ~~continues~~ performed additional~~its~~ evaluation of the area around SWMU 30, a historic pipeline break on Pier 91 just west of the short fill impoundment. Their work

has included collection of ground water samples from existing wells and ~~continued~~ periodic removal of LNAPL from those wells, as described in the table Proposed Additional Work (Roth Consulting 1998).

The Port plans to collect groundwater samples from the seven groundwater monitoring wells at AOC2 in October 2003 to assess groundwater conditions at the site of former underground storage tanks.

Semiannual project status reports also are provided to Ecology under the VCP as part of Ecology's requirements for corrective action at the Terminal 91 Upland.

SECTION F

PROCEDURES TO PREVENT HAZARDS

TABLE OF CONTENTS

SECTION F. PROCEDURES TO PREVENT HAZARDS

F1.0 Facility Security Procedures and Equipment

F1.1 Barrier and Means to Control Entry

40 CFR 264.14(b)(2)(i),(ii), 270.14(b)(4)
WAC 173-303-310(2)(c), 806(4)(a)(iv)

Burlington no longer conducts any operations at the Tank Farm Lease Parcel, except as required by the Agreed Order for corrective action. For purposes of this Application and the Agreed Order, the Tank Farm Lease Parcel is surrounded by a barrier wall (concrete walls and a six-foot-high chain link fence). The Port controls all ingress and egress from the Tank Farm Lease Parcel area through a security gate staffed by Port personnel. Exits and entrances are located to control traffic flow and to provide for emergency escape. See, Figure B1-2, Site Plan. The Tank Farm Lease Parcel is illuminated at dark by automatic outdoor lighting.

Parking for visitors/employees is north of the former Site Warehouse/Office Building 19. The Port closes and locks all gates providing access to the Site after operating hours.

The Port provides 24-hour controlled access to the Terminal 90 and 91 Complex. All entrances are manned by guards that also periodically patrol the area of the Site.

F1.2 Warning Signs

40 CFR 264.14(c)
WAC 173-303-310(2)(a)

Signs printed with the legend, "Danger - Unauthorized Personnel Keep Out" are posted on the gates and approximately every 50 feet along the perimeter fence of the Terminal 90 and 91 Complex. The demographics of the City of Seattle do not indicate a need for warning signs in languages other than English. The signs are visible from any approach to the Site and legible from a distance of 25 feet. They are attached to the fence and gates at a height of approximately five feet.

SECTION G
CONTINGENCY PLAN

Burlington has ceased all operations at the Site, except as required by the Agreed Order, and, therefore, the information requested in this section of the Application is no longer applicable.

SECTION H

TRAINING PLAN

Burlington has ceased all operations at the Site, except as required by the Agreed Order, and, therefore, the information requested in this section of the Application is no longer applicable.

SECTION I

CLOSURE PLAN AND CLOSURE COST ESTIMATES

TABLE OF CONTENTS

LIST OF FIGURES

SECTION I. CLOSURE PLAN AND CLOSURE COST ESTIMATES

40 CFR 264 Subparts G & H
WAC 173-303-806(4)(a)(xiii), 610

Note: The former dangerous waste management facility operated on the Site has been closed; therefore, with the exception of Section I1.0, Section I is not applicable.

I1.0 SITE CLOSURE

On March 3, 1997, Burlington submitted to Ecology the final documentation certifying above-ground closure of the Final Status (Part B) portions of the Tank Farm Lease Parcel. The required closure activities were completed from February 4 through 13, 1997 in accordance with the August 1996 Closure Plan and Closure Cost Estimates as approved by Ecology on October 29, 1996, following public comment regarding the Plan submitted as Part B Permit Modification Request PRMOD8-2.

Work required under the Closure Plan included verification sampling of the previously decontaminated containment surfaces in the RCRA yard (area of tanks 109-112, 164) and the concrete loading pad, and sand blasting the in-ground oil/water separator to remove 0.6 cm to achieve a "clean debris" surface. Figure I-1 shows the former regulated units at the Tank Farm Lease Parcel.

The March 3, 1997 correspondence included the following documentation:

- Independent registered professional engineer certifications;
- Cleaning certifications for the RCRA Yard and loading pad;
- Summary spread sheet and lab data report of verification analyses; and
- Map indicating verification sample locations.

SECTION J

OTHER FEDERAL AND STATE LAWS

TABLE OF CONTENTS

SECTION J. OTHER FEDERAL AND STATE LAWS

40 CFR 270.14(b)(20)
WAC 173-303-395(2) & (3)

J1.0 FEDERAL REQUIREMENTS

40 CFR 270.3

Environmental Protection Agency (EPA) regulations require that EPA follow the procedures under certain federal laws before granting or denying a Resource Conservation and Recovery Act (RCRA) permit. The discussion which follows provides a description of how these laws currently apply to existing corrective action conducted at the Site.

J1.1 Wild and Scenic Rivers Act

40 CFR 270.3(a)

The Site does not affect any rivers designated under the Wild and Scenic Rivers Act.

J1.2 National Historic Preservation Act of 1966

40 CFR 270.3(b)

The Site is not listed or eligible for listing on the national or local Registers of Historic Places.

J1.3 Endangered Species Act

40 CFR 270.3(c)
RCW 77.12.020

Threatened or endangered species known to exist on-site or in areas adjacent to the Site include bald eagles, Chinook salmon, and bull trout. On-site corrective action activities are not expected to affect critical habitat areas where endangered species might be present.

J1.4 Coastal Zone Management Act

40 CFR 270.3(d)

The State of Washington Shoreline Management Act (SMA) of 1971, under the jurisdiction of the Washington Department of Ecology (Ecology), is the approved implementation vehicle for the Coastal Zone Management Act. The SMA is implemented at the local level by individual shoreline master programs, which are prepared by local agencies and approved by Ecology.

The Tank Farm Lease Parcel is located in or near a designated shoreline area as defined in the City of Seattle Shoreline Master Program. Smith Cove and Smith Cove Waterway (east slip, center slip, and west slip) are located approximately 800 feet southwest and 600 feet south of the Tank Farm Lease Parcel, respectively (see Figure B1-1, Site Location Map). These surface waters are used for industrial and maritime activities in the Smith Cove area, and provide access to Elliott Bay and Puget Sound.

J1.5 Fish and Wildlife Coordination Act

40 CFR 270.3(e)

The PLPs do not propose to impound, divert, control, or modify any body of water in the vicinity of the Site as part of planned corrective action pursuant to the Agreed Order or applicable requirements. The PLPs do not currently anticipate consultation with state agencies having authority over wildlife resources potentially affected by such corrective action.

J1.6 RCRA Corrective Action Program

40 CFR 264.101; RCRA Hazardous and Solid Waste Amendments (HSWA) 1984 Section 3004(u), 3004(v), 3008(h), and 3013

The Corrective Action Program outlined in the regulations listed above requires corrective action for all releases of hazardous waste or constituents from hazardous waste treatment, storage, or disposal facilities, where necessary to protect human health and the environment.

In 1988, EPA issued an Order to Burlington under RCRA Section 3013 (the "3013 Order") to develop and implement a proposal for monitoring, analysis, and testing at the Site. Actions required by the 3013 Order led to sampling and analysis to determine if any dangerous constituents are present in the soil or groundwater. Pursuant to the 3013 Order, Burlington prepared and submitted a soil and groundwater investigation report for the Tank Farm Lease Parcel, Burlington to EPA on July 5, 1988.

Follow-up investigations were conducted in 1989, 1992 and 1993, and reported to EPA as part of the 3013 Order and the subsequent RCRA Section 3008(h) Order (the "3008(h) Order"). Burlington collected quarterly groundwater samples from all monitoring wells through January 1998 under the requirements of the 3008(h) Order. Evidence of petroleum products and free product was noted in several of the boring logs and monitoring wells.

In 1992, EPA conducted a visual site inspection ("VSI") of the entire Terminal 91 Complex, including the Tank Farm Lease Parcel. Based on that VSI, and on submittals from Burlington and the Port responding to requests for information on solid waste management units, EPA issued a Final RCRA Facility Assessment ("RFA") in November 1994. The RFA listed solid waste management units and areas of concern at the Terminal 91 Complex, including the Tank Farm Lease Parcel.

In March 1998, the Port submitted a Voluntary Cleanup Program ("VCP") application to Ecology for corrective action associated with the Terminal 91 Complex Uplands area exclusive of the Tank Farm Site. A summary of the corrective actions conducted by the Port and/or its tenants to date is presented in Section E of this Application.

In April 1998, the Agreed Order among Ecology, the Port, Burlington and PNO became effective. A summary of the corrective actions conducted to date by the Port, PNO and Burlington with respect to the Site is presented in Section E of this Application.

J2.0 STATE REQUIREMENTS

WAC 173-303-395(2) and (3)

Ecology regulations require that a facility that stores or handles dangerous waste comply with all applicable federal, state, and local environmental protection laws and

regulations. Following closure of the Burlington dangerous waste facility in 1997, no regulated waste streams have been managed by Burlington or the Port at the Tank Farm Lease Parcel. As such, the majority of state and local regulations described below are no longer applicable. A discussion of each regulation is included below.

J2.1 National Emission Standard for Asbestos

Ecology regulations [WAC 173-303-395(3)] require that all waste material containing asbestos be disposed at a facility operated in accordance with 40 CFR Part 61 Subpart M, National Emission Standard for Asbestos. Except to comply with requirements of the Agreed Order, Burlington no longer conducts operations at the Tank Farm Lease Parcel, therefore, this requirement is not applicable.

J2.2 State Water Pollution Control Standards

The Revised Code of Washington (RCW) Chapter 90.48 designates Ecology as the State Water Pollution Control Agency for the purposes of the Federal Clean Water Act to establish and administer state programs for water pollution control. State regulations require a waste disposal permit for industries discharging waste materials into public sewerage systems which discharge into public waters of the state. No industrial or sanitary wastewater is discharged from the Tank Farm Lease Parcel under the Permit; therefore, this regulation is not applicable.

Stormwater and run-off from paved and unpaved areas at the Tank Farm Lease Parcel are managed by the current tenant via an on-site stormwater management system. With this system, stormwater is discharged to the sanitary sewer under the tenant's discharge permit.

J2.3 Minimum Functional Standards for Solid Waste Handling

Regulations contained in Chapter 173-304 WAC establish minimum functional performance standards for solid waste handling, and operation of solid waste handling facilities. The Site was formerly operated as a dangerous waste management facility, and investigations associated with its former use continue to be addressed through an ongoing corrective action process. Any non-dangerous wastes managed as part of the corrective action process would be handled in compliance with this regulation. Permits

under this regulation are not expected to be required for on-site corrective action activities.

J2.4 State Environmental Policy Act

This Application does not propose any new activities that have the potential for creating environmental impacts. It is being submitted only to allow for continuation of ongoing corrective action activities that are required by the Agreed Order and/or the renewed Part B Permit. Dangerous waste operations have not occurred at the facility since 1997, and the applicants do not propose to resume such operations. The Port, Burlington and PNO will continue to conduct corrective action and post-closure activities under the renewed Permit and pursuant to Agreed Order and the applicable provisions of the Model Toxics Control Act. No SEPA review is required at this time because permit renewals that involve ongoing activities are categorically exempt from SEPA pursuant to Ecology's SEPA rules, WAC 197-11-800(14)(i). Pursuant to the SEPA rules that specifically govern cleanups conducted under the Model Toxics Control Act, a SEPA checklist will be submitted later in the process when specific cleanup proposals are developed. WAC 197-11-259.

J2.5 Puget Sound Clean Air Act

The Washington Clean Air Act and the Federal Clean Air Act are implemented by the Puget Sound Clean Air Agency (PSCAA). Currently, no activities proposed under the corrective action procedures of the Part B Permit are subject to PSCAA regulations.

J2.6 Model Toxics Control Act

Relevant portions of the Model Toxics Control Act as codified Chapter 173-340 WAC will be applied to clean-up activities at the Tank Farm Lease Parcel through the corrective action conditions of the Permit.

J3.0 LIST OF PERMITS

With the exception of the necessary RCRA Permit for ongoing corrective action activities, no other permits, including those subject to state and/or local regulatory authority, are held pursuant to the dangerous waste activities formerly conducted at the

Tank Farm Lease Parcel. Additional permits and registrations will be obtained as needed for activities such as construction or on-site remediation activities.

SECTION K

CERTIFICATION

SECTION K. CERTIFICATION

40 CFR 270.11
WAC 173-303-810(13)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Burlington Environmental Inc., a wholly owned subsidiary of Philip Services Corporation

_____

Signature

Jack Wolfin

Name

Vice President - Northwest Region

Title

_____

Date

I certify under penalty of law that the Port owns the real property described in, and is aware of the contents of, this permit application, and that I have received a copy of this application. As owner of the real property, the Port understands that it is responsible for complying with any requirements of chapter 173-303 WAC with which only it is able to comply, and that there are significant penalties for failure to comply with such requirements.

Port of Seattle

_____

Signature

Mic Dinsmore

Name

Chief Executive Officer

Title

_____

Date

Attachment A

Agreed Order No. DE 98HW-N108
by and among the Washington Department of Ecology ("Ecology"), Burlington, the Port and Pacific Northern Oil Corporation ("PNO") and made effective April 10, 1998

Attachment B
VCP Application and Cover Letter